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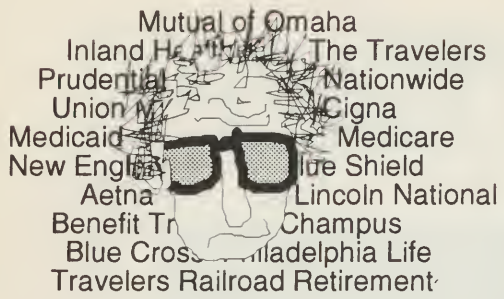
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Cover: Facade of the entryway designed by Ellicott and Emmart, Architects in 1908 for the Med Chi building at 1211 Cathedral Street. See accompanying article beginning on page 47.

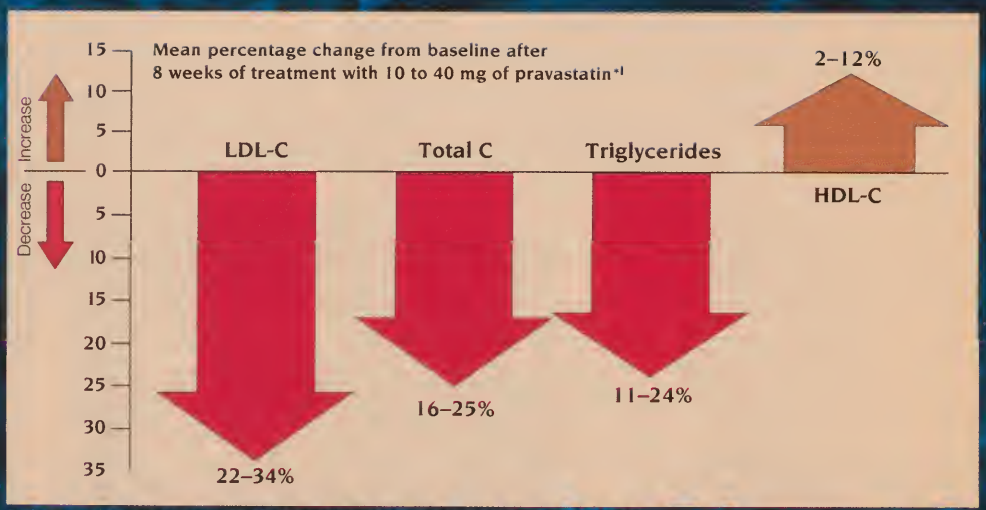
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Reference: 1. Jones PH, et al. Once-daily pravastatin in patients with primary hypercholesterolemia: a dose-response study. *Clin Cardiol.* 1991;14:146-151.

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CONTRAINDICATIONS

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Pregnancy and lactation. Atherosclerosis is a chronic process and discontinuation of lipid-lowering drugs during pregnancy should have little impact on the outcome of long-term therapy of primary hypercholesterolemia. Cholesterol and other products of cholesterol biosynthesis are essential components for fetal development (including synthesis of steroids and cell membranes). Since HMG-CoA reductase inhibitors decrease cholesterol synthesis and possibly the synthesis of other biologically active substances derived from cholesterol, they may cause fetal harm when administered to pregnant women. Therefore, HMG-CoA reductase inhibitors are contraindicated during pregnancy and in nursing mothers. **Pravastatin should be administered to women of childbearing age only when such patients are highly unlikely to conceive and have been informed of the potential hazards.** If the patient becomes pregnant while taking this class of drug, therapy should be discontinued and the patient apprised of the potential hazard to the fetus.

WARNINGS

Liver Enzymes: HMG-CoA reductase inhibitors, like some other lipid-lowering therapies, have been associated with biochemical abnormalities of liver function. Increases of serum transaminase (ALT, AST) values to more than 3 times the upper limit of normal occurring on 2 or more (not necessarily sequential) occasions have been reported in 1.3% of patients treated with pravastatin in the U.S. over an average period of 18 months. These abnormalities were not associated with cholestasis and did not appear to be related to treatment duration. In those patients in whom these abnormalities were believed to be related to pravastatin and who were discontinued from therapy, the transaminase levels usually fell slowly to pretreatment levels. These biochemical findings are usually asymptomatic although worldwide experience indicates that anorexia, weakness, and/or abdominal pain may also be present in rare patients.

As with other lipid-lowering agents, liver function tests should be performed during therapy with pravastatin. Serum aminotransferases, including ALT (SGPT), should be monitored before treatment begins, every six weeks for the first three months, every eight weeks during the remainder of the first year, and periodically thereafter (e.g., at about six-month intervals). Special attention should be given to patients who develop increased transaminase levels. Liver function tests should be repeated to confirm an elevation and subsequently monitored at more frequent intervals. If increases in AST and ALT equal or exceed three times the upper limit of normal and persist, then therapy should be discontinued. Persistence of significant aminotransferase elevations following discontinuation of therapy may warrant consideration of liver biopsy.

Active liver disease or unexplained transaminase elevations are contraindications to the use of pravastatin (see CONTRAINDICATIONS). Caution should be exercised when pravastatin is administered to patients with a history of liver disease or heavy alcohol ingestion (see CLINICAL PHARMACOLOGY: Pharmacokinetics/Metabolism). Such patients should be closely monitored, started at the lower end of the recommended dosing range, and titrated to the desired therapeutic effect.

Skeletal Muscle: Rhabdomyolysis with renal dysfunction secondary to myoglobinuria has been reported with pravastatin and other drugs in this class. Uncomplicated myalgia has also been reported in pravastatin-treated patients (see ADVERSE REACTIONS). Myopathy, defined as muscle aching or muscle weakness in conjunction with increases in creatine phosphokinase (CPK) values to greater than 10 times the upper limit of normal was reported to be possibly due to pravastatin in only one patient in clinical trials (<0.1%). Myopathy should be considered in any patient with diffuse myalgias, muscle tenderness or weakness, and/or marked elevation of CPK. Patients should be advised to report promptly unexplained muscle pain, tenderness or weakness, particularly if accompanied by malaise or fever. **Pravastatin therapy should be discontinued if markedly elevated CPK levels occur or myopathy is diagnosed or suspected. Pravastatin therapy should also be temporarily withheld in any patient experiencing an acute or serious condition predisposing to the development of renal failure secondary to rhabdomyolysis, e.g., sepsis; hypotension; major surgery; trauma; severe metabolic, endocrine, or electrolyte disorders; or uncontrolled epilepsy.**

The risk of myopathy during treatment with lovastatin is increased if therapy with either cyclosporine, gemfibrozil, erythromycin, or niacin is administered concurrently. There is no experience with the use of pravastatin together with cyclosporine. Myopathy has not been observed in clinical trials involving small numbers of patients who were treated with pravastatin together with niacin. One trial of limited size involving combined therapy with pravastatin and gemfibrozil showed a trend toward more frequent CPK elevations and patient withdrawals due to musculoskeletal symptoms in the group receiving combined treatment as compared with the groups receiving placebo, gemfibrozil, or pravastatin monotherapy. Myopathy was not reported in this trial (see PRECAUTIONS: Drug Interactions). One patient developed myopathy when clofibrate was added to a previously well tolerated regimen of pravastatin; the myopathy resolved when clofibrate therapy was stopped and pravastatin treatment continued. **The use of fibrates alone may occasionally be associated with myopathy. The combined use of pravastatin and fibrates should generally be avoided.**

PRECAUTIONS

General: Pravastatin may elevate creatine phosphokinase and transaminase levels (see ADVERSE REACTIONS). This should be considered in the differential diagnosis of chest pain in a patient on therapy with pravastatin.

Homozygous Familial Hypercholesterolemia. Pravastatin has not been evaluated in patients with rare homozygous familial hypercholesterolemia. In this group of patients, it has been reported that HMG-CoA reductase inhibitors are less effective because the patients lack functional LDL receptors.

Renal Insufficiency. A single 20 mg oral dose of pravastatin was administered to 24 patients with varying degrees of renal impairment (as determined by creatinine clearance). No effect was observed on the pharmacokinetics of pravastatin or its 3α-hydroxy isomeric metabolite (SQ 31,906). A small increase was seen in mean AUC values and half-life ($t_{1/2}$) for the inactive enzymatic ring hydroxylation metabolite (SQ 31,945). Given this small sample size, the dosage administered, and the degree of individual variability, patients with renal impairment who are receiving pravastatin should be closely monitored.

Information for Patients: Patients should be advised to report promptly unexplained muscle pain, tenderness or weakness, particularly if accompanied by malaise or fever.

Drug Interactions: *Immunosuppressive Drugs, Gemfibrozil, Niacin (Nicotinic Acid), Erythromycin:* See WARNINGS: Skeletal Muscle.

Antipyrine: Clearance by the cytochrome P450 system was unaltered by concomitant administration of pravastatin. Since pravastatin does not appear to induce hepatic drug-metabolizing enzymes, it is not expected that any significant interaction of pravastatin with other drugs (e.g., phenytoin, quinidine) metabolized by the cytochrome P450 system will occur.

Cholestyramine/Colestipol: Concomitant administration resulted in an approximately 40 to 50% decrease in the mean AUC of pravastatin. However, when pravastatin was administered 1 hour before or 4 hours after cholestyramine or 1 hour before colestipol and a standard meal, there was no clinically significant decrease in bioavailability or therapeutic effect. (See DOSAGE AND ADMINISTRATION: Concomitant Therapy.)

Warfarin: In a study involving 10 healthy male subjects given pravastatin and warfarin concomitantly for 6 days, bioavailability parameters at steady state for pravastatin (parent compound) were not altered. Pravastatin did not alter the plasma protein-binding of warfarin. Concomitant dosing did increase the AUC and Cmax of warfarin but did not produce any changes in its anticoagulant action (i.e., no increase was seen in mean prothrombin time after 6 days of concomitant therapy). However, bleeding and extreme prolongation of prothrombin time has been reported with another drug in this class. Patients receiving warfarin-type anticoagulants should have their prothrombin times closely monitored when pravastatin is initiated or the dosage of pravastatin is changed.

Cimetidine: The $AUC_{0\text{-}12hr}$ for pravastatin when given with cimetidine was not significantly different from the AUC for pravastatin when given alone. A significant difference was observed between the AUC's for pravastatin when given with cimetidine compared to when administered with antacid.

Digoxin: In a crossover trial involving 18 healthy male subjects given pravastatin and digoxin concurrently for 9 days, the bioavailability parameters of digoxin were not affected. The AUC of pravastatin tended to increase, but the overall bioavailability of pravastatin plus its metabolites SQ 31,906 and SQ 31,945 was not altered.

Gemfibrozil: In a crossover study in 20 healthy male volunteers given concomitant single doses of pravastatin and gemfibrozil, there was a significant decrease in urinary excretion and protein binding of pravastatin. In addition, there was a significant increase in AUC, Cmax, and Tmax for the pravastatin metabolite SQ 31,906. Combination therapy with pravastatin and gemfibrozil is generally not recommended.

In interaction studies with *aspirin, antacids* (1 hour prior to PRAVACHOL), *cimetidine, nicotinic acid, or probucol,* no statistically significant differences in bioavailability were seen when PRAVACHOL (pravastatin sodium) was administered.

Other Drugs: During clinical trials, no noticeable drug interactions were reported when PRAVACHOL was added to: diuretics, antihypertensives, digitalis, converting-enzyme inhibitors, calcium channel blockers, beta-blockers, or nitroglycerin.

Endocrine Function: HMG-CoA reductase inhibitors interfere with cholesterol synthesis and lower circulating cholesterol levels and, as such, might theoretically blunt adrenal or gonadal steroid hormone production. Results of clinical trials with pravastatin in males and post-menopausal females were inconsistent with regard to possible effects of the drug on basal steroid hormone levels. In a study of 21 males, the mean testosterone response to human chorionic gonadotropin was significantly reduced ($p<0.004$) after 16 weeks of treatment with 40 mg of pravastatin. However, the percentage of patients showing a ≥50% rise in plasma testosterone after human chorionic gonadotropin stimulation did not change significantly after therapy in these patients. The effects of HMG-CoA reductase inhibitors on spermatogenesis and fertility have not been studied in adequate numbers of patients. The effects, if any, of pravastatin on the pituitary-gonadal axis in pre-menopausal females are unknown. Patients treated with pravastatin who display clinical evidence of endocrine dysfunction should be evaluated appropriately. Caution should also be exercised if an HMG-CoA reductase inhibitor or other agent used to lower cholesterol levels is administered to patients also receiving other drugs (e.g., ketoconazole, spironolactone, cimetidine) that may diminish the levels or activity of steroid hormones.

CNS Toxicity: CNS vascular lesions, characterized by perivascular hemorrhage and edema and mononuclear cell infiltration of perivascular spaces, were seen in dogs treated with pravastatin at a dose of 25 mg/kg/day, a dose that produced a plasma drug level about 50 times higher than the mean drug level in humans taking 40 mg/day. Similar CNS vascular lesions have been observed with several other drugs in this class.

A chemically similar drug in this class produced optic nerve degeneration (Wallerian degeneration of retinogeniculate fibers) in clinically normal dogs in a dose-dependent fashion starting at 60 mg/kg/day, a dose that produced mean plasma drug levels about 30 times higher than the mean drug level in humans taking the highest recommended dose (as measured by total enzyme inhibitory activity). This same drug also produced vestibulocochlear Wallerian-like degeneration and retinal ganglion cell chromatolysis in dogs treated for 14 weeks at 180 mg/kg/day, a dose which resulted in a mean plasma drug level similar to that seen with the 60 mg/kg dose.

Carcinogenesis, Mutagenesis, Impairment of Fertility: In a 2-year study in rats fed pravastatin at doses of 10, 30, or 100 mg/kg body weight, there was an increased incidence of hepatocellular carcinomas in males at the highest dose ($p<0.01$). Although rats were given up to 125 times the human dose (HD) on a mg/kg body weight basis, their serum drug levels were only 6 to 10 times higher than those measured in humans given 40 mg pravastatin as measured by AUC.

The oral administration of 10, 30, or 100 mg/kg (producing plasma drug levels approximately 0.5 to 5.0 times human drug levels at 40 mg) of pravastatin to mice for 22 months resulted in a statistically significant increase in the incidence of malignant lymphomas in treated females when all treatment groups were pooled and compared to controls ($p<0.05$). The incidence was not dose-related and male mice were not affected.

A chemically similar drug in this class was administered to mice for 72 weeks at 25, 100, and 400 mg/kg body weight, which resulted in mean serum drug levels approximately 3, 15, and 33 times higher than the mean human serum drug concentration (as total inhibitory activity) after a 40 mg oral dose. Liver carcinomas were significantly increased in high-dose females and mid- and high-dose males, with a maximum incidence of 90 percent in males. The incidence of adenomas of the liver was significantly increased in mid- and high-dose females. Drug treatment also significantly increased the incidence of lung adenomas in mid- and high-dose males and females. Adenomas of the eye Harderian gland (a gland of the eye of rodents) were significantly higher in high-dose mice than in controls.

No evidence of mutagenicity was observed *in vitro*, with or without rat-liver metabolic activation, in the following studies: microbial mutagen tests, using mutant strains of *Salmonella typhimurium* or *Escherichia coli*; a forward mutation assay in L5178Y TK +/− mouse lymphoma cells; a chromosomal aberration test in hamster cells; and a gene conversion assay using *Saccharomyces cerevisiae*. In addition, there was no evidence of mutagenicity in either a dominant lethal test in mice or a micronucleus test in mice.

In a study in rats, with daily doses up to 500 mg/kg, pravastatin did not produce any adverse effects on fertility or general reproductive performance. However, in a study with another HMG-CoA reductase inhibitor, there was decreased fertility in male rats treated for 34 weeks at 25 mg/kg body weight, although this effect was not observed in a subsequent fertility study when this same dose was administered for 11 weeks (the entire cycle of spermatogenesis, including epididymal maturation). In rats treated with this same reductase inhibitor at 180 mg/kg/day, seminiferous tubule degeneration (necrosis and loss of spermatogenic epithelium) was observed. Although not seen with pravastatin, two similar drugs in this class caused drug-related testicular atrophy, decreased spermatogenesis, spermatocytic degeneration, and giant cell formation in dogs. The clinical significance of these findings is unclear.

Pregnancy: Pregnancy Category X: See CONTRAINDICATIONS.

Safety in pregnant women has not been established. Pravastatin was not teratogenic in rats at doses up to 1000 mg/kg daily or in rabbits at doses of up to 50 mg/kg daily. These doses resulted in 20x (rabbit) or 240x (rat) the human exposure based on surface area (mg/meter^2). However, in studies with another HMG-CoA reductase inhibitor, skeletal malformations were observed in rats and mice. PRAVACHOL (pravastatin sodium) should be administered to women of child-bearing potential only when such patients are highly unlikely to conceive and have been informed of the potential hazards. If the woman becomes pregnant while taking PRAVACHOL (pravastatin sodium), it should be discontinued and the patient advised again as to the potential hazards to the fetus.

Nursing Mothers: A small amount of pravastatin is excreted in human breast milk. Because of the potential for serious adverse reactions in nursing infants, women taking PRAVACHOL should not nurse (see CONTRAINDICATIONS).

Pediatric Use: Safety and effectiveness in individuals less than 18 years old have not been established. Hence, treatment in patients less than 18 years old is not recommended at this time. (See also PRECAUTIONS: **General**.)

ADVERSE REACTIONS

Pravastatin is generally well tolerated; adverse reactions have usually been mild and transient. In 4-month long placebo-controlled trials, 1.7% of pravastatin-treated patients and 1.2% of placebo-treated patients were discontinued from treatment because of adverse experiences attributed to study drug therapy; this difference was not statistically significant. In long-term studies, the most common reasons for discontinuation were asymptomatic serum transaminase increases and mild, non-specific gastrointestinal complaints. During clinical trials the overall incidence of adverse events in the elderly was not different from the incidence observed in younger patients.

Adverse Clinical Events: All adverse clinical events (regardless of attribution) reported in more than 2% of pravastatin-treated patients in the placebo-controlled trials are identified in the table below, also shown are the percentages of patients in whom these medical events were believed to be related or possibly related to the drug:

	All Events %		Events Attributed to Study Drug %	
Body System/Event	Pravastatin (N = 900)	Placebo (N = 411)	Pravastatin (N = 900)	Placebo (N = 411)
Cardiovascular				
Cardiac Chest Pain	4.0	3.4	0.1	0.0
Dermatologic				
Rash	4.0*	1.1	1.3	0.9
Gastrointestinal				
Nausea/Vomiting	7.3	7.1	2.9	3.4
Diarrhea	6.2	5.6	2.0	1.9
Abdominal Pain	5.4	6.9	2.0	3.9
Constipation	4.0	7.1	2.4	5.1
Flatulence	3.3	3.6	2.7	3.4
Heartburn	2.9	1.9	2.0	0.7
General				
Fatigue	3.8	3.4	1.9	1.0
Chest Pain	3.7	1.9	0.3	0.2
Influenza	2.4*	0.7	0.0	0.0
Musculoskeletal				
Localized Pain	10.0	9.0	1.4	1.5
Myalgia	2.7	1.0	0.6	0.0
Nervous System				
Headache	6.2	3.9	1.7*	0.2
Dizziness	3.3	3.2	1.0	0.5
Renal/Genitourinary				
Urinary Abnormality	2.4	2.9	0.7	1.2
Respiratory				
Common Cold	7.0	6.3	0.0	0.0
Rhinitis	4.0	4.1	0.1	0.0
Cough	2.6	1.7	0.1	0.0

*Statistically significantly different from placebo.

The following effects have been reported with drugs in this class:

Skeletal: myopathy, rhabdomyolysis.

Neurological: dysfunction of certain cranial nerves (including alteration of taste, impairment of extra-ocular movement, facial paresis), tremor, vertigo, memory loss, paresthesia, peripheral neuropathy, peripheral nerve palsy.

Hypersensitivity Reactions: An apparent hypersensitivity syndrome has been reported rarely which has included one or more of the following features: anaphylaxis, angioedema, lupus erythematous-like syndrome, polymyalgia rheumatica, vasculitis, purpura, thrombocytopenia, leukopenia, hemolytic anemia, positive ANA, ESR increase, arthritis, arthralgia, urticaria, asthenia, photosensitivity, fever, chills, flushing, malaise, dyspnea, toxic epidermal necrolysis, erythema multiforme, including Stevens-Johnson syndrome.

Gastrointestinal: pancreatitis, hepatitis, including chronic active hepatitis, cholestatic jaundice, fatty change in liver, and, rarely, cirrhosis, fulminant hepatic necrosis, and hepatoma; anorexia, vomiting.

Reproductive: gynecomastia, loss of libido, erectile dysfunction.

Eye: progression of cataracts (lens opacities), ophthalmoplegia.

Laboratory Test Abnormalities: Increases in serum transaminase (ALT, AST) values and CPK have been observed (see WARNINGS).

Transient, asymptomatic eosinophilia has been reported. Eosinophil counts usually returned to normal despite continued therapy. Anemia, thrombocytopenia, and leukopenia have been reported with other HMG-CoA reductase inhibitors.

Concomitant Therapy: Pravastatin has been administered concurrently with cholestyramine, colestipol, nicotinic acid, probucol and gemfibrozil. Preliminary data suggest that the addition of either probucol or gemfibrozil to therapy with lovastatin or pravastatin is **not** associated with greater reduction in LDL-cholesterol than that achieved with lovastatin or pravastatin alone. No adverse reactions unique to the combination or in addition to those previously reported for each drug alone have been reported. Myopathy and rhabdomyolysis (with or without acute renal failure) have been reported when another HMG-CoA reductase inhibitor was used in combination with immunosuppressive drugs, gemfibrozil, erythromycin, or lipid-lowering doses of nicotinic acid. Concomitant therapy with HMG-CoA reductase inhibitors and these agents is generally not recommended. (See WARNINGS: **Skeletal Muscle** and PRECAUTIONS: **Drug Interactions.**)

OVERDOSAGE

There have been no reports of overdoses with pravastatin.

Should an accidental overdose occur, treat symptomatically and institute supportive measures as required.

(J4-422A)

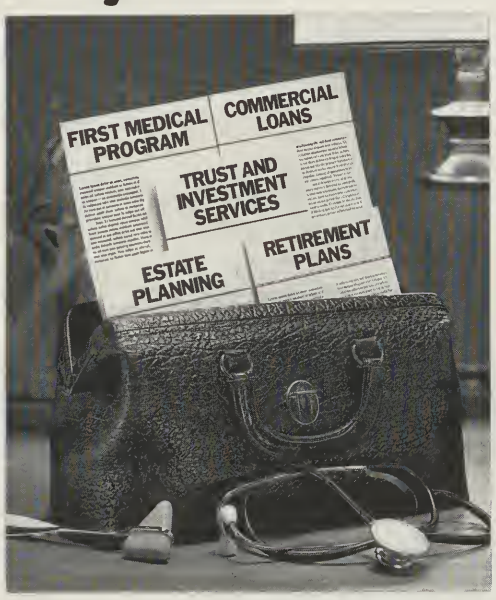
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Issued: September 1992

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Executive Director's Newsletter

Joseph J. Harrison III, Comptroller/Associate Executive Director for Med Chi, dies at 63

On Saturday, January 16, 1993, Joe Harrison, who had worked for Med Chi for over 30 years, died after an apparent heart attack at his home in Ellicott City, Maryland. Mr. Harrison was chief financial officer of Med Chi, treasurer of the Maryland Medical Political Action Committee, and manager of various for-profit insurance activities under the separately held Med Chi Agency.

Committee Selection Cards 1993-1994

Med Chi members interested in serving on a Med Chi committee during the 1993-94 committee year should complete the committee selection card following this newsletter. All members must complete this card to be considered for appointment.

Donald "Ted" Lewers, M.D. — Candidate for AMA Board of Trustees

Med Chi past president, Donald "Ted" Lewers, M.D., has announced his candidacy for election to the AMA Board of Trustees. Dr. Lewers chairs the AMA Council on Legislation on which he has served for over five years. He sits on the AMA Technical Advisory Committee on Health System Reform and represents the AMA on the RBRVS update committee. While chair of the AMA ad hoc CLIA Committee, he worked behind the scenes with HCFA and the CDC to help obtain the extensions for and modifications of the CLIA regulations. Dr. Lewers is highly regarded for testifying for the AMA before Congress and the National Governor's Conference on several occasions. He is the seasoned leader we need to lead America's physicians. Contact your out-of-state colleagues and ask them to call their AMA delegation and express their support of Dr. Lewers' candidacy.

Annual Meeting — Registration and Room Reservations

"Prevention '93—Maryland" is the theme for this year's annual meeting, which will take place Thursday, April 29 through Saturday, May 1, 1993, at the University of Maryland, University Conference Center, College Park. Please fill out the registration form on the preliminary agenda immediately following the *Executive Director's Newsletter*. For room reservations, please call 1-800-727-8622 and give Med Chi's group number: G2568. Reservations must be made by March 29, 1993.

Medicare Training

The next **new provider** training session is scheduled for

DATE: March 3, 1993
TIME: 9:00 a.m. - 12 Noon
PLACE: Holiday Inn, 2004 Greenspring Drive, Timonium, MD 21093

To register, call 410-561-4037, 561-4057, 561-2058, or 561-4061. Give the representative your name, Medicare provider number, and the number of attendees from your office. To register by mail, write to Judy Tristani, Medicare B Professional Relations Dept., 1946 Greenspring Drive, Timonium MD 21093.

Performing Arts Medicine Conference

"Performing Arts Medicine II: Focus on Young Performers" is a conference on the special problems of performing artists scheduled for March 20-21, 1993 at the Med Chi Faculty Building, 1211 Cathedral Street, Baltimore. Sponsored by Med Chi's Committee on Medicine and Performing Arts, this conference is scheduled to include discussions on focal dystonia, eating disorders, Alexander and Feldenkrais techniques, drug side effects, conditioning and physical fitness, problems of marching musicians, and implications of the Americans with Disabilities Act. For more information about this conference, see the ad on pages 111–112 of this *MMJ*.

Disposal of Mustard Gas Program Scheduled for 1993 Annual Meeting

Because the military currently plans to dispose of mustard gas at Maryland's Edgewood Arsenal, a program on the treatment for mustard gas exposure is scheduled to be featured during the Med Chi annual meeting from 12:30 p.m. to 5:00 p.m. on Thursday, April 29, 1993. The four-hour program will feature sections on treatment of poison gas intoxication and organophosphate insecticide intoxication, and precautions needed during decontamination. Invited guest speakers include Hank Siegelson, M.D. and Sanford Leffingwell, M.D. from the Centers for Disease Control in Atlanta. To register for this program, please fill out the annual meeting registration form and indicate your interest in this specific program. Watch the *MMJ* for more information about this program.

President's Regional Conference—Southern Maryland

The President's Regional Conference for Southern Maryland will be held at the Holiday Inn in Solomons, Maryland at 4:30 p.m. on April 1, 1993. Surveys have been mailed to physicians in Southern Maryland requesting that they submit subjects of interest. If you have not yet submitted your subjects, please feel free to call and add them to the agenda. Watch the *Executive Director's Newsletter* for more information about this conference or contact Joan Mannion at 410-539-0872 or 1-800-492-1056.

Med Chi Sponsors Press Conference to Announce Innovative Anti-Smoking Campaign

On January 11, 1993, Med Chi held a press conference to announce an innovative anti-smoking campaign that targets the advertising of tobacco products. The campaign focuses on physicians using peel-and-stick labels that read: "WARNING: This magazine contains cigarette advertisements. Your physician does not support the use of any tobacco products or the advertising of such products." The following media covered the story:

Television	- WMAR-TV (Channel 2, Baltimore)	- WJZ-TV (Channel 13, Baltimore)
	- WBFF-TV (Channel 45, Baltimore)	- WBOC-TV, Salisbury
Radio	- WBAL-AM, Baltimore	- WCBM-AM, Owings Mills
	- WFMD-AM, Frederick	- WGMS-AM/FM, Rockville
	- WMAL-AM, Washington	- WPOC-FM, Baltimore
	- WSER-AM, Elkton	
Newspaper	- *Arundel Sun*, Anne Arundel County	- *Baltimore Sun*, Baltimore
	- *Carroll Sun*, Carroll County	- *Daily Record*, Baltimore
	- *Evening Sun*, Baltimore	- *Howard Sun*, Howard County

For more information on this topic, see the president's letter following this *Executive Director's Newsletter.*

Security Alert — Committee on Emergency Medical Services Offers Security Checklist for Freestanding Physician Offices

A recent assault of two physicians occurred in a private office. The increasing nature of violence in our society suggests the importance of reviewing building security plans in all freestanding physician offices. For whatever reason, when the assault occurred, the response to the call for help was delayed, allowing more physical abuse.

You should review your office security building plans. A checklist for your convenience follows:

1. Examine the adequacy of your plan for addressing physician and staff assault situations in all areas of the suite.
2. Check that the names of security personnel are current.
3. Verify that telephone numbers of security personnel are current and accurate.
4. Determine if staff are aware and trained to report in accordance with the plan/procedure.
5. Establish a means for the physician to alert staff to contact security if an assault occurs in the physician's office.
6. Call security/police to determine the response time in the event of an assault.
7. Have police or security personnel evaluate your plan.

8. Ensure that the plan and needed telephone numbers are readily available/visible for use.
9. Conduct a test of the plan—verify that staff act properly and in a prompt manner.
10. Establish a mechanism to ensure that new staff are oriented regarding the plan.
11. Test the plan quarterly or semiannually to ensure staff's familiarity with it and assess the need for changes.

CLIA Regulation

The January 19, 1993 *Federal Register* contains a technical correction to the CLIA regulation. The final regulation, which has a 60-day comment period, establishes the physician-performed microscopy category. This new category includes vaginal wet mount preparations, pinworm examinations, fern tests, post-coital examinations, KOH (potassium-hydroxide) preparations, and urine sediment. For futher information, contact Rose Matricciani at 410-539-0872 or 1-800-492-1056.

"Gag Rule"

President Clinton reversed the "gag rule," thereby allowing the entire health care team of physicians, nurses, and counselors the freedom to discuss all medical options with patients.

Fetal Tissue Research

The ban on fetal tissue research has been lifted by President Clinton in an executive order issued on January 22, 1993.

HCFA's Medicare Fee Schedule

Some of the changes in Medicare's fee schedule for 1993 are

1. Nonsurgical services receive a 0.8 % increase. The conversion factor for nonsurgical services is $31.249.
2. Surgical services receive a 3.1 % increase. The conversion factor for surgical services is $31.962.
3. The separate anesthesia conversion factor is increased by the nonsurgical update from $13.94 to $14.05.
4. New payment floors for all providers for clean claims are
   a. electronic claims—14 days
   b. paper claims—27 days

   Interest will be paid after 24 days for participating physicians on clean claims only.
5. The limiting charge is 115 % of the fee schedule amount for nonparticipating physicians in 1993.

Important Notice Regarding Classified Advertising in the MMJ

The *MMJ* Editorial Board decided that effective with the April 1993 issue, prepayment is required for all classified advertising. If you have any questions about this new policy or about classified advertising, please call Lori Robinson at 410-539-0872 or 1-800-492-1056. For complete details about classified advertising, see page 123 in this issue of the *MMJ*.

New Physician/EKG Bills

The following bills have been introduced into Congress:

- S 31 — Senator John McCain (R-AZ) — repeals the reduced Medicare payment rate for new physicians during the first four years of practice;
- S 176 — Senator Robert Dole (R-KS) — contains provisions to repeal the new physician payment cuts and to restore payment for EKG interpretations;
- HR 21 — Representative Dan Rostenkowski (D-IL) — contains provisions to repeal the new physician payment disparity and restore EKG payments; and
- HR 421 — Representative Robert Torricelli (D-NJ) — contains provisions to restore the EKG payments.

HHS Seeks Nominations for Advisory Council

The Agency for Health Care Policy and Research of the Department of Health and Human Services (HHS) in Rockville, Maryland is seeking nominations for the National Advisory Council for Health Care Policy, Research, and Evaluation. The agency will replace six members, representing research and the health professions, whose terms expire next May. For more information, call Bob Isquith, Public Relations Branch Chief of Health Care Policy Research at 301-227-8370.

Angelo J. Troisi, F.A.C.H.E.
Executive Director

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WRITER'S DIRECT DIAL NO.

December 30, 1992

Dear Friend:

I am writing to alert you to operations which are preying upon medical professionals in this state and around the country. Essentially, these out of state operations sell advertising space in brochures which they claim will be distributed to thousands of union members. These operations typically misrepresent their affiliation with a union and/or exaggerate the circulation of their advertising brochures.

In order to protect against this problem, we recommend that medical professionals take the following precautions:

- Request that phone solicitors send written material describing their company and what they are selling.
- Be wary of any solicitor who offers to pick up money by a courier.
- Ask for specific union affiliation and then verify that affiliation.

If you have any questions about a particular solicitor or about their affiliation with a particular union, you can contact President Ernie Grecco (who brought this matter to my attention) of the Metropolitan Baltimore Council of the AFL-CIO at (410) 242-1300. He, like other labor leaders in our state, is greatly concerned about this deceptive practice. I urge you to share this warning with your members. Thank you very much.

Very truly yours,

J. Joseph Curran, Jr.
Attorney General

cc: President Ernie Grecco

Medical
and Chirurgical Faculty
of Maryland

President's Letter

Prepared by the president of the Medical and Chirurgical Faculty of Maryland as a service to members

January 1993

Dear Colleague:

Your patients' health is on the forefront of your agenda and ours. More of your patients will die from cigarette-related illnesses than from other drugs, alcohol, homicide, suicide, car accidents, fires, and AIDS combined. Something must be done to help your patients stop smoking.

The Medical and Chirurgical Faculty of Maryland (Med Chi) has initiated an innovative anti-smoking campaign to assist you in warning your patients about the dangers of smoking. The campaign began with the development of an educational program titled "How to Help Your Patients Stop Smoking," and included the distribution of an anti-smoking public service announcement to local television stations. The latest effort in this campaign, which was reviewed and approved by the legal division of the American Medical Association, targets the advertising of tobacco products.

Inside this issue of the *Maryland Medical Journal* you will find one set of peel-and-stick labels that read: "WARNING: This magazine contains cigarette advertisements. Your physician does not support the use of any tobacco products or the advertising of such products."

Med Chi will provide a supply of these labels to you at no charge. I ask that you place these labels on waiting room magazines that contain tobacco advertising. The use of these labels in your waiting room will give you the opportunity to discuss smoking cessation with your patients.

To the best of our knowledge, Med Chi is the only state medical society involved in this kind of effort, making patients aware of the cigarette advertisements in magazines. Governor William Donald Schaefer issued a statement applauding Med Chi's anti-smoking initiative. But, I need your help to make this campaign successful. Please work with us to promote a healthier Maryland.

To obtain additional labels, at no charge, please call (410)539-0872 or 1-800-492-1056 and place your order with the switchboard operator.

Sincerely,

Jose M. Yosuico, M.D.
President

195th Annual Meeting

of the

Medical and Chirurgical Faculty of Maryland

at the

University of Maryland
University College Conference Center

Thursday-Saturday, April 29-May 1, 1993

Prevention 1993 — Maryland

Preliminary Agenda*

Thursday, April 29, 1993

8:30 am - 5:00 pm — **Registration/Exhibits open**

9:00 am - 10:30 am — **"Early Intervention in Rheumatoid Arthritis: Does It Make a Difference?"**
Maryland Society for Rheumatic Diseases
CME Credit: 1.5

9:00 am - 10:30 am — **"Case Management of the Seropositive HIV Patient"**
Med Chi Committee on Aids
CME Credit: 1.5

9:00 am - 10:30 am — **"Substance Abuse Education for Primary Care Physicians: An Overview of Treating the Substance Abusing Patient"**
Med Chi Department of Education
CME Credit: 1.5

10:30 am - 11:00 am — **Break—Visit the Exhibits**

11:00 am - 12:00 noon — **"Cues and Clues in Performing Arts Medicine"**
Med Chi Committee on Medicine and the Performing Arts
CME Credit: 1

12:00 noon - 1:00 pm — **Lunch on your own**

1:00 pm - 5:30 pm — **"Clearing the Air about Poisonous Gas"**
Med Chi Committee on Scientific Activity and the Maryland Chapter, American College of Emergency Physicians
CME Credit: 4

(Physicians attending this conference are requested to pre-register. See the registration form for details.)

1:00 pm - 3:00 pm — **"Medical Management in Home Care"**
Med Chi Committee on Long-Term Care and Geriatrics
CME Credit: 2

3:00 pm - 3:30 pm — **Break—Visit the Exhibits**

3:30 pm - 4:30 pm — **"Preventing and Responding to Domestic Violence: What Every Physician Should Know"**
Med Chi Public Relations Committee, Med Chi Committee on Public Health, and the Med Chi Auxiliary
CME Credit: 1

3:30 pm - 5:30 pm — **"Preventive Health Care for the Elderly Patient"**
Med Chi Committee on Long-Term Care and Geriatrics and the Prince George's County Medical Society
CME Credit: 2

4:45 pm - 5:45 pm — **"Prevention of Coronary Artery Disease in Women"**
Med Chi Committee on Women in Medicine
CME Credit: 1

Friday, April 30, 1993

7:30 am - 5:00 pm — **Registration**

8:00 am - 5:00 pm — **Exhibits open**

8:00 am - 10:00 am — **"Medicine on Trial: An Interactive Risk Management Program for Physicians"**
Medical Mutual Liability Insurance Society of Maryland
CME Credit: 2

10:00 am - 12:00 noon — **Med Chi Council Meeting**

11:30 am - 12:30 pm — ***Robinson Memorial Lectureship in Dermatology*—"Pulsed Dye Laser Therapy of Cutaneous Vascular Lesions"**
Maryland Dermatologic Society
CME Credit: 1

12:00 noon - 1:00 pm — **Lunch on your own**

12:00 noon - 1:00 pm — **Prayer Luncheon—"Unnecessary Treatment in Terminal Illness: Overutilization?"**
Med Chi Committee on Medicine and Religion
CME Credit: 1

(An additional fee required to attend this luncheon. See registration form for details.)

2:30 pm - 4:00 pm — **Med Chi House of Delegates Meeting**

3:30 pm - 4:30 pm — **"Update on Injury Prevention in the Workplace"**
Maryland Society of Physical Medicine and Rehabilitation and the Maryland Society of Orthopaedic Rehabilitation and Occupational Medicine
CME Credit: 1

3:30 pm - 5:30 pm — **"Significant Changes in CME Policies and Procedures"**
Med Chi Continuing Medical Education Review Committee
CME Credit: 2

Support Our Exhibitors

Exhibits are an important part of Med Chi's annual meeting and are a valuable adjunct to the scientific program.

By visiting the exhibits before and after your scientific program, you will help ensure that Med Chi receives valuable income that allows us to offer you annual and semiannual meetings.

Med Chi urges you to express your appreciation to exhibitors by visiting their booths and discussing your mutual involvement in patient care.

---

* Please note this is a preliminary agenda. More meetings, events, and continuing medical education activities may be added to the advance program which will be published in the *Maryland Medical Journal* prior to the meeting.

Registration Form

Please print clearly:

Name_____

Address_____

City_____ State _____ Zip _____

Telephone_____ County Society _____

Check all boxes that apply

❑ Med Chi Members No Charge

❑ Pre-registered nonmembers $35.00/presentation hour*

i.e. $35.00 x _____ hours = $_____

(Note: There is no charge for "Clearing the Air About Poisnous Gas")

*There will be an on-site registration fee of $15.00 for non-members who do not pre-register.

Event Pre-registration*

❑ **"Clearing the Air About Poisonous Gas"** No Charge

Thursday, April 29, 1993 1:00 pm - 5:30 pm

Med Chi Committee on Scientific Activity and the Maryland Chapter, American College of Emergency Physicians

CME Credit: 4

❑ **Prayer Luncheon -- "Unnecessary Treatment in Terminal Illness: Overutilization?"** $15.00 _____

Friday, April 30, 1993 12:00 noon - 1:00 pm

Med Chi Committee on Medicine and Religion

CME Credit: 1

❑ **"Practice Managment Strategies for Young Physicians"** No Charge

Saturday, May 1, 1993 12:00 noon - 1:30 pm

a special luncheon meeting sponsored by Physician's Practice Digest

CME Credit: None

❑ **Presidential Banquet Honoring Jose M. Yosuico, M.D.** $60.00 _____

Saturday, May 1, 1993 6:00 pm - 1:00 am

Total $_____

Form of payment (check one)

❑ check payable to Med Chi ❑ Visa ❑ Mastercard

Card# _____ Expiration Date_____

Signature_____

Return this form to:

Med Chi Communications Department
1211 Cathedral Street
Baltimore, MD 21201-5585

You may fax your registration to 410-547-0915 or phone your registration by calling Lori Robinson or Vivian Smith at 1-800-492-1056 or 410-539-0872.

Telephone Messages

During the meeting, messages may be relayed to participants by calling 301-985-7300.

Hotel Reservations

The University of Maryland University College Conference Center offers comfortabe accommodations complete with color cable television, telephone, private bath, and desk. Guests at the Conference Center can also enjoy a wide variety of recreational facilties including an 18-hole golf course, tennis and raquetball courts, weight rooms, swimming pools, and jogging paths.

Med Chi has reserved a limited number of rooms at a special group rate of $65.00 for a single occupancy room and $80.00 for a double occupancy room.*

To recieve this special group rate, you must make your room reservation by **March 29, 1993**. To make a reservation call 1-800-727-8622 and give Med Chi's group number: G2568.

* Tax and incidentals not included.

Miscellaneous

Contact Joan Mannion at 1-800-492-1056 or 410-539-0872 with questions about continuing medical education sessions.

For general questions regarding the annual meeting, call Betsy Newman at 1-800-492-1056 or 410-539-0872.

Saturday, May 1, 1993

8:00 am - 12:00 noon — **Registration/ Exhibits open**

8:30 am - 10:00 am — **"Treatment of Depression as Secondary Prevention"**
Med Chi Committee on Mental Health and the Maryland Psychiatric Society
CME Credit: 1.5

8:30 am - 10:00 am — **"Prevention of Headaches/Anxiolytics and Narcotics —Prescription vs. Abuse"**
Med Chi Committee on Drugs
CME Credit: 1.5

8:30 am - 10:00 am — **"Prevention of Disease in Pediatrics and Primary and Secondary Cancer Prevention"**
Maryland Academy of Family Physicians and the Department of Family Medicine at the University of Maryland at Baltimore
CME Credit: 1.5

10:00 am - 12:00 noon — **"Latex Anaphylaxis and an Overview of Intraoperative Anaphylaxis"**
Maryland Asthma and Allergy Society
CME Credit: 2

10:00 am - 12:00 noon — **"Prevention of Heart Disease and Stroke, the Basics and the Controversies"**
American Heart Association-Maryland Affiliate, Inc.
CME Credit: 2

10:00 am - 10:30 am — **Break—Visit the Exhibits**

10:30 am - 12:00 noon — **"Recent Breakthroughs in Understanding and Reducing Physician Stress"**
Med Chi Physician Rehabilitation Committee
CME Credit: 1.5

12:00 noon - 1:00 pm — **Lunch on your own**

12:00 noon - 1:30 pm — **"Practice Management Strategies for Young Physicians"**
sponsored by Physician's Practice Digest
(Pre-registration is required for this luncheon meeting. See registration form for details.)

1:30 pm - 4:00 pm — **Med Chi House of Delegates**
(Med Chi Council Meeting immediately follows the House of Delegates)

6:00 pm - 1:00 am — **Presidential Banquet Honoring Jose M. Yosuico, M.D.**
(An additional fee is required to attend this function. See registration form for details)

Continuing Medical Education Credits

The Medical and Chirurgical Faculty of Maryland is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor continuing medical education for physicians.

The Medical and Chirurgical Faculty of Maryland designates this continuing medical education activity for up to 16 credit hours in Category 1 of the Physicians Recognition Award of the American Medical Association. Physician's attending this year's meeting can earn up to a maximum of 16 CME credits.

Directions

The University of Maryland University College Conference Center is located at the corner of University Boulevard and Adelphi Road in College Park, Maryland.

From Baltimore and points north: Take I-95 South to the Capital Beltway (I-495) toward College Park. Take exit for U.S. 1 South (Exit 25B). Proceed approximately 1 mile south on U.S. 1 and turn right onto MD Route 193 West. At 3rd traffic light, turn left onto Adelphi Road. On Adelphi, make first, immediate left onto Campus Drive. The Conference Center will be visible on your left. Parking for guests is available in the 4th driveway on the left.*

From Bowie/Anapolis areas and points east: Take MD Route 50 to Capital Beltway (I-95). Go north on 95 to College Park. Take exit U.S. 1 South (Exit 25B). Proceed approximately 1 mile south on U.S. 1 and turn right onto MD Route 193 West. At 3rd traffic light, turn left onto Adelphi Road. On Adelphi, make first, immediate left onto Campus Drive. The Conference Center will be visible on your left. Parking for guests is available in the 4th driveway on the left.*

From Washington, D.C.: Take George Washington Parkway to I-495 (toward Rockville). Follow I-495 and take exit for New Hampshire Avenue/Takoma Park (650). Go south on New Hampshire Avenue and turn left at the second light (Adelphi Road). Stay on Adelphi Road for approximately 3 miles (you will go through 3 traffic lights). At the 4th light, turn left on Campus Drive. The Conference Center will be visible on your left. Parking for guests is available in the 4th driveway on the left.*

From Montgomery County and points west: Take the Capital Beltway (I-495) to New Hampshire Avenue/Takoma Park (650). Go south on New Hampshire Avenue and turn left at the second light (Adelphi Road). Stay on Adelphi Road for approximately 3 miles (you will go through 3 traffic lights). At the 4th light, turn left on Campus Drive. The Conference Center will be visible on your left. Parking for guests is available in the 4th driveway on the left.*

* A parking garage for the Conference Center is scheduled to be completed May 1, 1993. If necessary, Med Chi will publish updates about parking at the Conference Center in the *MMJ*.

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The rewards of a River Falls home go well beyond dollars and cents. You've also made a great investment for your family. River Falls is a way of life where raising a family with old-fashioned values is still important. A neighborhood that you can depend on to support the growth and development of your children. Active community involvement and community-owned olympic-sized pool, tennis courts, clubhouse, and playing field assures a wide range of family programs. Nearby are excellent public and private schools, convenient shopping and easy access to suburban Maryland, downtown D.C., and Northern Virginia.

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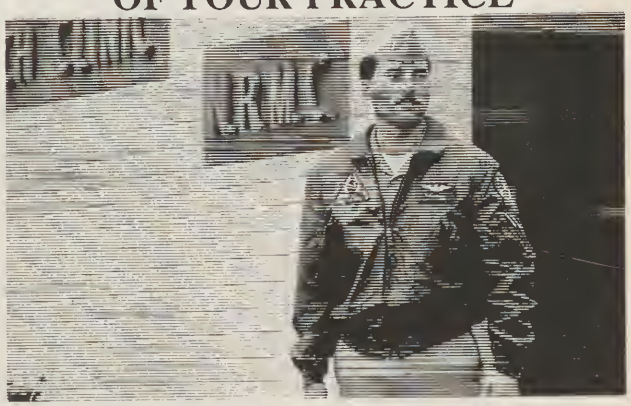
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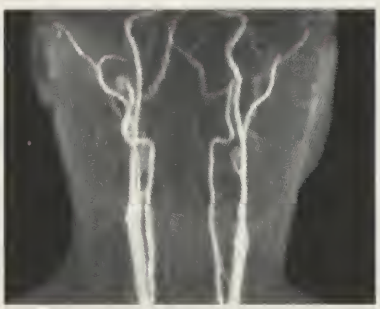
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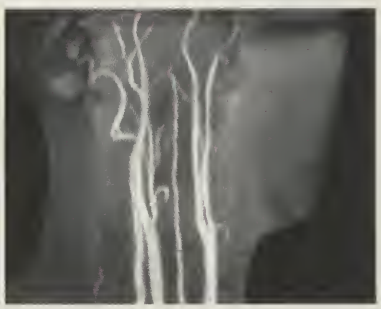
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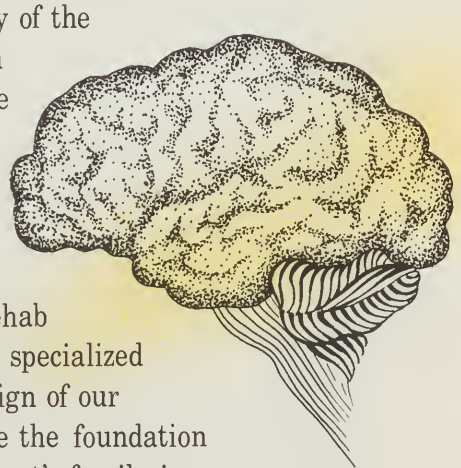
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LETTERS TO THE EDITOR

University of Maryland's experience with chorionic villus sampling: A different view of this questionable procedure

We reviewed the article entitled "Chorionic villus sampling: The University of Maryland experience" by W. Allen Hogge, M.D. et al in the June 1992 issue of the *Maryland Medical Journal*.[1]

In this study, the University of Maryland reported their experience on performing chorionic villus sampling (CVS) on 998 patients with a 99.1% success rate. The overall loss rate was 2.3%, and there was no increase in the incidence of birth defects seen. The authors concluded that these observations demonstrated that CVS provides a safe and accurate alternative to amniocentesis. We think that the University of Maryland's success rate of 99.1% indicates a high degree of technical expertise and is quite laudable; however, we cannot agree that the observations in this study demonstrate that CVS provides a safe and accurate alternative to amniocentesis, nor do we think that CVS is even a desirable alternative to amniocentesis.

Numerous recent studies from England published in the *Lancet,* as well as studies performed at the Michael Reese Hospital in the United States, have linked CVS to a significant increase in limb deformities.[2–6] The study by the University of Maryland of 998 patients is not large enough to conclude one way or the other whether there is an increase in limb reduction defects.

The overall loss rate seen by the University of Maryland was 2.3%. It is difficult to assess the true meaning of this loss rate since it is not possible to determine how many of the pregnancy losses were due to the procedure and how many would have occurred in any case. A much larger prospective European study[3] has demonstrated that CVS results in a greater than 4% increase in loss rate due to the procedure itself when compared to amniocentesis. American and Canadian studies have estimated a loss rate of 0.8 to 2.7%.[7,8] Even this lower loss rate is far in excess of that expected in experienced hands with amniocentesis. The amniocentesis loss rate is generally quoted as less than 0.2% One should keep in mind that the finding of chromosome abnormalities in the general at risk population for these procedures is usually in the order of magnitude of 1% to 2%; therefore, a 2% loss rate or a 10-fold increase in loss rate over that attributed to amniocentesis is rather a significant increase from the procedure.

There are other reasons why we find that CVS is not as desirable a procedure as amniocentesis. One of these is that CVS does not provide a neural tube defect diagnosis. Patients undergoing CVS should have maternal serum alphafetoprotein (AFP) testing done at 16 weeks of pregnancy. If this is positive, and it will be positive in approximately 5% of the cases, patients who have already undergone CVS must also undergo amniocentesis. Additionally, some of the chromosomal results from the CVS are indeterminate, and these patients also must undergo amniocentesis. As the University of Maryland's study indicated, mosaicism was detected in 11 cases (1.1%), but only three of these abnormalities were confirmed either on amniotic fluid cells or fetal tissue. This represents a true abnormality rate of 27.3% when a mosaicism result is detected by CVS. Thus, CVS can result in an indeterminate chromosomal status that requires additional amniocentesis.

The major advantage of CVS is that results can be obtained earlier in the pregnancy than the results obtained with amniocentesis. CVS is generally performed between 10 and 12 weeks menstrual age. We believe that to some patients this is an important advantage; however, we and others have found that early amniocentesis performed between 11 and 14 weeks provides a superior method of early diagnosis for these patients. Early amniocentesis appears to be a safe procedure, although there is less experience with it than there is with traditional amniocentesis, which is performed from 15 weeks onward.[9–11] Early amniocentesis does indeed provide a neural tube defect diagnosis. In order to provide this diagnosis, we have been gathering median values of amnionic fluid AFP at 11 to 14 weeks menstrual age for the past two years. These weeks are not difficult to measure with the standard amniotic fluid AFP test kit because the amnionic fluid AFP during these weeks is in fact higher than that found from 15 weeks onward. Therefore, we have found no technical difficulties in making a neural tube diagnosis on amniotic fluid from the early amniocentesis. Acetylcholinesterase tests can also be performed to back-up these test results in early amniocentesis.

We have been providing our patients with three choices with regard to prenatal diagnosis. Our first choice is traditional amniocenteses, which we believe is the standard of care in the field. The widest amount of data is available with regard to the safety and accuracy of this procedure. Our second choice has been early amniocentesis. As we mentioned earlier, amniocentesis provides an answer almost as early as that of CVS while apparently exposing the patient to fewer risks and less ambiguous results, as well as providing the patient with a neural tube defect analysis. Our third choice is CVS. For patients to receive a CVS, we require that they undergo counseling and that they be made aware of the two alternate procedures—namely regularly am-

The University of Maryland defends its position

We appreciate the opportunity to respond to the letter to the editor entitled "University of Maryland's experience with chorionic villus sampling: A different view of this questionable procedure." We also appreciate the authors' interest in our study.

The letter reflects a rather selective review of the literature and a rather selective interpretation of that literature. To take the authors' concerns in order, the information regarding limb abnormalities has been found in only a few sporadic locations around the world and almost always in centers with limited experience doing chorionic villus sampling.[1,2] A more balanced view of the subject can be found in the recent *Lancet* article describing the results of over 100,000 chorionic villus samplings with complete follow-up of those patients.[3] In this study, the incidence of limb abnormalities following chorionic villus sampling was no different than the background rate of this disorder. Therefore, it is safe to conclude that the risk of limb-reduction defects following chorionic villus sampling done at the correct gestational age in experienced programs is not significantly increased over that of the general population not undergoing chorionic villus sampling. Certainly it is appropriate to inform patients of these studies and discuss in a balanced fashion the available literature on this topic.

Secondly, the authors comment on our 2.3% loss rate. They seem to have focused on the older studies, such as the prospective European study,[4] and have ignored the most recent report from the National Institutes of Health (NIH) Collaborative Study.[5] In any case, it should be pointed out that the Medical Research Council (MRC) study has been criticized for a number of reasons. The most important reason was the significant inexperience of the investigators in this study. To be included in the study, the investigator needed only to have experience in performing chorionic villus sampling in 30 practice procedures (that is, pregnancies planning to have termination following the practice procedure). It should not be surprising that the loss rate in the hands of very inexperienced CVS operators, compared with those with significant amniocentesis experience, should be dramatically different. Of note, the most recent NIH study found an overall loss rate of 2.8% for chorionic villus sampling, which indicates a significant decrease from the original study that had been done when many of the programs were inexperienced. Given the new information, the study suggests that the risk of chorionic villus sampling is not different than that of amniocentesis.

The authors state that "the amniocentesis rate is generally quoted as less than 0.2%." We know of no study that documents this low a loss rate. The generally accepted loss rate for amniocentesis is 0.5%, and this is a traditional risk figure that is not supported by recent data. The more recent data in a well-controlled study of experienced individuals, using ultrasound guidance, found a 1% greater risk for patients undergoing amniocentesis than for those not having amniocentesis.[6] Therefore, the authors would do well to review their own data with respect to this loss rate figure.

niocentesis and early amniocentesis. We also feel compelled to inform these patients of several relatively conservative facts concerning CVS.

1. Many studies have associated CVS with an increased rate of miscarriage in the range of 0.8 to 4.5%.
2. Several studies have associated CVS with an increase in limb reduction defects.
3. CVS does not provide a neural tube defect analysis and, therefore, maternal serum AFP screening at 16 weeks is necessary. Five percent of the patients subsequently have to undergo amniocentesis as well as a CVS.
4. CVS chromosome analysis yields ambiguous results in 1 to 2 % of the cases, and these patients must also undergo a follow-up amniocentesis to resolve the ambiguity.

Patients who are fully counseled in this way may then elect to have CVS performed in our units. It has been our experience and that of others, that most patients when so counseled elect either regular amniocentesis or early amniocentesis. Only a small percentage of the patients, when fully informed, actually elect CVS.

We agree with Dr. Felix de la Cruz of the National Institutes of Health,[12] who stated that he thinks electing CVS is a personal choice, but that the patient should be provided full information for informed consent. We think it's important that clinicians be fully aware of the potential problems with CVS, and, in fact, a number of major CVS units are either shutting down or vastly limiting access to this procedure. We think that patients should have the choice, but when fully informed, CVS will be selected by a small minority of patients over the alternatives of regular amniocentesis and early amniocentesis.

We conclude that based on data in the literature, serious questions have been raised regarding the safety and accuracy of CVS as a diagnostic method for first trimester diagnosis.

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The authors then state that chorionic villus sampling is not as desirable a procedure as amniocentesis because of the lack of information regarding the risk for neural tube defects. They equate the risk of a first positive maternal serum alphafetoprotein (AFP) with the incidence of amniocentesis in patients undergoing chorionic villus sampling. Again, they should review the literature to understand that although 5% of the population will have an elevated maternal serum AFP, if the usual protocol of repeating the sample followed by ultrasound dating is performed, the risk of an unexplained elevation of AFP will be closer to 1.5%. In view of the excellent ability of ultrasound to detect neural tube defects, the number of patients requiring amniocentesis should be quite small in the population that has undergone chorionic villus sampling.

The authors continue with the assumption that early amniocentesis may be a better alternative than chorionic villus sampling because it provides information regarding neural tube defects. What the authors have failed to recognize is that the determination of median values for amniotic fluid AFP at 11 to 14 weeks menstrual age does not give them information regarding the detection rate for neural tube defects in this gestational age group. Much more data will need to be obtained in order to determine if the detection rate for neural tube defects is the same at 11 to 14 weeks as it is from 16 to 18 weeks of the pregnancy. More importantly, the authors state that an acetylcholinesterase test can be performed as a back-up to these tests. There is significant literature to support the fact that there is a high false-positive rate of acetylcholinesterase in early amniocentesis, resulting in a significant number of patients requiring a second amniocentesis.[7]

The authors' letter also implies that early amniocentesis has been studied and is safe. What they fail to tell the patients is that there is no controlled study that has been done comparing early amniocentesis with either chorionic villus sampling or standard amniocentesis, although at least one limited study in an experienced center showed the risk of pregnancy loss following early amniocentesis to be twice that of chorionic villus sampling and four times that of traditional amniocentesis.[8] This certainly would suggest that the procedure is not a safe alternative to chorionic villus sampling, but sufficient information is not available to make statements regarding the risk of early amniocentesis.

In addition, there are significant concerns regarding the removal of amniotic fluid at 12 to 14 weeks' gestation, which is a critical time for fetal lung development. In view of the documented increase in respiratory distress and pneumonia after midtrimester amniocentesis, respiratory difficulties after early amniocentesis must be a significant concern to be answered by controlled studies.[6] In addition, there is concern about normal development of joints and the risk of such disorders as clubfoot following early amniocentesis. What the authors failed to recognize is that early amniocentesis remains an investigational procedure, and well-controlled studies need to be done to compare it with traditional amniocentesis and chorionic villus sampling, both of which ave been studied extensively. What studies have been done to date do not support the statement of the authors that "early amniocentesis exposes the patient to fewer risks and less ambiguous results, as well as providing the patient with a neural tube defect analysis."

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In closing, the authors failed to recognize the first rule of prenatal diagnosis. That is, the patient should be given a fair evaluation of all available options. The authors imply, by the use of their term, "our first choice," that the counseling is not nondirective, but, in fact, extremely directive regarding the various procedures. The letter, as written, suggests that the authors do not give a balanced view of all available options for the patient. The "facts" concerning chorionic villus sampling, as outlined by the authors, are all in error and reflect significant bias. Informed consent for the patient implies that the individuals giving this information are also informed. The statement that "a number of major CVS units are either shutting down or vastly limiting access to this procedure" is entirely false and continues the series of misstatements and misrepresentations that not only misinform the journal's readership, but have likely misinformed patients seeking prenatal diagnosis.

The conclusions of our study remain the same. The safety and accuracy of chorionic villus sampling do allow it to be favorably compared with traditional amniocentesis and offered as an alternative to the patient. The decision regarding which procedure to choose should be the patient's, based on unbiased presentations. The University of Maryland offers chorionic villus sampling, traditional amniocentesis, and early amniocentesis. The option for these procedures is based on the patient's informed consent. Until further information is available, the option of early amniocentesis should be offered only as part of an investigational protocol.

We thank the authors for allowing us to respond to their concerns.

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■ ■ ■

LETTERS TO THE EDITOR

Is a lobbyist really necessary?

Isn't it time to re-evaluate the need for professional lobbyists to represent Med Chi. In the past, physician representatives from our society who were willing, knowledgeable, and respected served our society well. They were aided by Med Chi's administrative staff whose job it was to inform them of pending legislation and assist them in obtaining an audience before legislative committees. Their emphasis was on the health of our community, but they were also aware of the needs of the medical profession.

Recently, our society retained a firm of lawyers who were expensive, did not always speak for our membership, and who perhaps could be accused of conflict of interests. I read in the *Sun* papers that they have been dismissed. Instead we have retained our ex-governor to be our lobbyist. Are his qualifications better?

Is our medical society so lacking in educated and honest members who are willing and able to represent us before legislative committees that we must hire a professional lobbyist? Do we need professional lobbyists at all?

FRED J. HELDRICH, M.D.
Baltimore

Response from the leadership

We welcome the comments expressed in Dr. Heldrich's letter. In the past, it was indeed physician involvement with representatives that led to Med Chi's successes in Annapolis. Our Legislative Committee has traditionally done its job very well, and we are once again returning to the concept that Med Chi is a physician-directed organization.

It should be noted that Dr. Martinez has been appointed as Legislative Committee chairperson for 1992-93 and, as in the past, has organized the Legislative Committee into subcommittees (e.g., public health, medical practices), each designed to address specific functions. This was done so as to develop a cadre of informed and knowledgeable physicians who will testify in Annapolis on cited subjects. This committee, supported by two vice chairpersons, Hilary O'Herlihy, M.D., and J.R. Lilly, M.D., will assure our success. We are all aware that success in Annapolis during the past few years has often been based on access to policy-makers.

To assist during this transition period, from being led by outside lobbyists to having physicians once again represent physicians, we needed someone who had knowledge of the system in Annapolis and could ensure that physicians would be given the appropriate opportunity to be heard.

Our former lobbyists resigned October 28, 1992, leaving insufficient time for our physicians to cultivate the relationships necessary to increase the probabilities of success in Annapolis. This left us with little choice but to obtain the services of one who knew the players in Annapolis and had knowledge of the system, former Governor Marvin Mandel.

He appeared to be the best choice to meet our current needs and help Med Chi through this transition period.

JOSE YOSUICO, M.D.
President

■ ■ ■

LETTERS TO THE EDITOR

A trenchant reader writes

Thanks for "Star wars" (*MMJ* Word Rounds. October 1992). Great reading.

Yet, and for my own peace of mind, should not *allemond* and *trenches* have been *allemand* and *trenchées*, respectively?

I am in a happy state of retirement, and as you can sense, I have the time to delve in, what one might term, trivial matters.

I send you this note in friendship.

ARMAND J. LANDRY, M.D.
Salisbury

The writer responds from the trenches

Thank you for noticing the error in my spelling of the French *allemand* 'German.' However, I believe that the French precursor of trench is *trencier* 'to cut or dig', which itself stems directly from Latin *truncare* 'to mutilate.'

Incidentally, there was a popular German dance in the 16th century—a stately processional performed in 4/4 time—which became fashionable at the French court of King Henry the IV. The French called it the **Allemande** in honor of its country of origin. It begat a stylized musical genre, which was usually written as the first movement of a suite, as in Bach's *English Suites.*

As dances evolved and emigrated to North America, a form known as the **square dance** developed. By the 19th century it had become one of the most popular dances in our country and was now led by callers who shouted out the choreographic variations to each group of four couples. One of these is "allemande left—or right," an improvisation on those earlier forms.

They also call out the "do-si-do"—a variation of the French *dos-a-dos* 'back to back', which derives from the Latin *dorsum.*

In any case, your observations were quite **trenchant.**

BART GERSHEN, M.D.
Rockville ■

Erratum

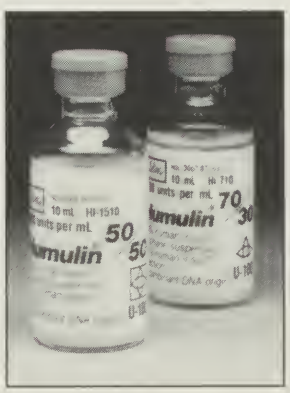
In the December issue, the name of the author of the letter to the editor entitled, "The future of medicine—The doctor's role," was not listed. The author was J.T.H. Johnson, M.D. of Brooklandville, Maryland. The *MMJ* regrets the error.



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Have you come a long way, baby?
Smoking trends in women

Cynthia M. Lipsitz, M.D., M.P.H.

Dr. Lipsitz is director of the Bureau of Personal Health, Howard County Health Department, Columbia, MD.

The relative risks of smoking-related diseases are increasing for women as the ratio of men smokers to women smokers closes. In addition, recognition of smoking as a women's health risk has increased because of its adverse effects in pregnancy; its interaction with oral contraceptives; and its association with cancer of the uterine cervix, earlier menopause, and osteoporosis.

The surgeon general's first report on smoking in 1964 drew worldwide attention with its conclusion that "cigarette smoking is causally related to lung cancer in men; the magnitude of the effect of cigarette smoking far outweighs all other factors. The data for women, though less extensive, point in the same direction..."[1]

"I'm a Lucky Girl"
Cigarette advertisement from 1930.[2]

"You've come a long way, baby."
Cigarette advertisement from 1980.

By 1980, the surgeon general of the United States devoted his annual report on the health consequences of smoking to its effects on women. Noting that "the rise in lung cancer death rates is currently much steeper in women than in men," he projected that "the age-adjusted lung cancer death rate will surpass that of breast cancer in the early 1980s."[3] Around 1985, this occurred, and the trend has continued into this decade while the lung cancer death rate for men has leveled off.[4]

In addition to increasing the relative risks of several diseases affecting both sexes, such as lung cancer, smoking has been established as a women's health risk because of its adverse effects on pregnancy and child health; its interaction with oral contraceptives as a risk factor for myocardial infarction and subarachnoid hemorrhage; and its association with cancer of the uterine cervix, early menopause, and osteoporosis. As smoking among women continues to decline more slowly than among men, the health consequences of smoking for women remain of significant concern.

Historical trends

In the 1880s, the development of the cigarette manufacturing machine made cigarettes widely available and cheap. Men took up cigarette smoking in great numbers in the early 20th century, especially during World War I. Widespread cigarette use by women lagged behind men by 25 to 30 years.[3]

Although the prevalence of smoking among men has always remained greater than among women, the ratio of male-to-female adult smokers in the United States has declined steadily since 1935 (**Table 1**).[5] According to the Centers for Disease Control's (CDC) National Health Interview Survey, 49.4 million (28.1% of all adults) were current smokers in 1988: 25.6 million men (30.8% of all men) and 23.7 million women (25.7% of all women)—a ratio of 1.19.[6] In Maryland, data from the 1985 Current Population Survey for state residents aged 20 or older are consistent with the national trend, reporting 26.7% of Maryland males and 26.2% of females as current smokers.[7]

Table 1. Percentage of adults reporting themselves to be smokers, U.S., by sex and year*

Year	% Males (1)	% Females (2)	% Total (3)	Ratio male to female rates (4) = (1) - (2)
1935	52.5	18.1	n.a.	2.90
1955	52.6	24.5	37.6	2.15
1965	52.4	34.1	42.7	1.54
1970	44.5	31.9	37.8	1.39
1976	41.9	32.0	36.4	1.31
1980	38.3	29.4	33.6	1.30
1985	33.2	27.9	30.4	1.19

Note:
*For years 1965-85, the rates are for adults 20 years and older, taken from the Health Interview Survey; for 1955, adults 17 years and older, from supplement to Current Population Survey; ages not indicated for 1935.
From: *Selling Smoke: Cigarette Advertising and Public Health*, Kenneth E. Warner, ed. Copyright 1986 by the American Public Health Association. Reprinted with permission.

Beginning to smoke at an early age increases the risk of heavier smoking and smoking-attributable disease and death. Therefore, data that point to initiation of smoking at younger and younger ages, especially among females, cause particular concern. Overall, the average age at initiation of smoking descended from 19.7 years among persons born from 1910 through 1919 to 17.4 years among those born from 1950 through 1959. The average age at initiation descended considerably more for white and African-American women (5.4 and 4.6 years, respectively) than for white men (0.5 years); for African-American men there was a slight rise in the age of initiation (0.7 years).[8]

Although nationwide the prevalence of daily cigarette smoking among high school seniors decreased from 29% in 1976 to 21% in 1980 and has stabilized between 18% to 21% since then, the prevalence of smoking among high school senior females has consistently exceeded that among males since 1977.[1]

Until recently, smoking initiation was increasing among the least educated females.[9] Both national and Maryland data from the CDC's Behavioral Risk Factor Survey (BRFS) have shown an inverse relationship between the educational level achieved and cigarette smoking. This relationship could explain the alarming 44% prevalence rate of smoking observed among pregnant women enrolled in Maryland's public health maternity clinics.[7] National BRFS data from 25 states and the District of Columbia indicate that 35% of pregnant women who did not graduate from high school smoke cigarettes.[7] Pregnant women and women of childbearing age represent a critical population to reach with smoking control measures.

The American Cancer Society's Cancer Prevention Studies (CPS) characterized the smoking habits of men and women in the United States over two time periods: from 1960 to 1972 (CPS I) and from 1982 to 1986 (CPS II). Comparing the two study periods, women in each age cohort studied in the CPS II smoked more cigarettes a day and began smoking an average of 7.2 years earlier than women in CPS I.[4]

The CPS data have also shown that men and women differ in their choices of cigarettes based on their tar and nicotine content. In 1982, 34.8% of men smoked brands with less than 12 mg of tar, whereas these brands constituted 51.6% of brands smoked by women.[3] Some writers claim that women are more likely than men to smoke "low-yield" brands because women believe these brands are safer than other kinds of cigarettes.[10] However, while the amount of tar exposure has been associated with an increased relative risk of lung cancer in women and in men, tar content is less important in lung cancer risk than the number of cigarettes smoked.[4] A recent study of myocardial infarction risk among women also indicates about the same risk of myocardial infarction among low-yield smokers as among high-yield smokers.[11] It has been suggested that there is no "safe" cigarette.[12]

Mortality

As the surgeon general predicted in 1980, lung cancer deaths among women did exceed breast cancer deaths in the mid 1980s.

While lung cancer mortality rates increased two to fourfold among older male smokers over the two decades between CPS I and II, among women 45 and older, the rates increased four to sevenfold during the same time period. This, as part of the large increase in overall smoking-attributable mortality among women between 1965 and 1985, may be a direct consequence of the adoption of lifelong smoking initiated in their teenage years.[1] Of particular interest, among younger men

and women in the United States, death rates from lung cancer as well as heart disease have begun to decline, a trend attributed to the declining prevalence of smoking in this country.[13]

Deaths due to chronic obstructive pulmonary disease (COPD) have also increased in the past two decades among women who smoke. In those age 55 and older, COPD death rates increased two to threefold. Excess risk was much greater for individuals who smoked heavily than for light smokers.[1,3]

In 1991, the CDC updated its estimates of smoking-attributable mortality using data from 1988. Among the new categories of diseases added to the 1991 analysis were cervical cancer and perinatal diseases, both applicable to women only. Smoking appeared to increase the relative risk of cervical cancer death almost twofold, resulting in 1,246 deaths in the United States in 1988. Some 2,552 perinatal disease deaths (defined as infant deaths due to short gestation, low birthweight, respiratory distress syndrome, other respiratory conditions of the newborn, and sudden infant death syndrome) were attributed to smoking by the infant's mother during pregnancy.[13]

Although not included in the statistics on smoking-attributable mortality, fetal deaths also contribute to the death toll due to smoking. The 1980 surgeon general's report stated that "the risk of spontaneous abortion, fetal death, and neonatal death increases directly with increasing levels of maternal smoking during pregnancy."[3] One study published in 1988 showed adjusted infant mortality rates of 15.1 per 1,000 white nonsmokers and 23.3 per 1,000 for white women who smoke more than a pack a day. Among African-American women, the infant mortality rate was 26.0 for nonsmokers and 39.9 for smokers.[14]

Morbidity

Since the publication of the surgeon general's first report on smoking in 1964, thousands of studies have advanced our knowledge of the diseases associated with smoking and the strength of those associations. Information on the specific effects of smoking on women's health appeared more slowly than information for men because women were either not included or not represented in significant numbers in the earliest studies of smoking and health. Also, the later onset of widespread smoking among women possibly led to later recognition of the extent of its consequences.[15,16]

"Blow the smoke my way." Said by a female nonsmoking model to a male smoking model in a 1930s era cigarette advertisement.[12]

In 1979, the surgeon general stated in the 15th anniversary report the following summary of knowledge regarding smoking and morbidity in women:

> In general, female current cigarette smokers report more acute and chronic conditions including chronic bronchitis and/or emphysema, chronic sinusitis, peptic ulcer disease, and arteriosclerotic heart disease than women who never smoked.[3]

The association between maternal smoking and infant low birthweight, and between the use of oral contraceptives and increased harmful effects of smoking on the cardiovascular system were also recognized by 1979.[1] The 1980 report on smoking and women emphasized a causal association between smoking and cancer of the lung, larynx, oral cavity, and esophagus in women as well as men.[3]

Since that time, the litany of diseases related to smoking has grown, and further studies have confirmed previously suspected causal relationships. Involuntary smoking has been established as a cause of disease, including lung cancer, in healthy nonsmokers regardless of sex. Recently, some authorities have claimed, based on evidence as extensive as that linking involuntary smoking and lung disease, that there is a causal link between involuntary smoking and heart disease.[17] The 25th anniversary surgeon general's report of 1989 declared a causal relationship between smoking and cerebrovascular disease, a relationship potentiated in women by use of oral contraceptives. This report also cited an association between smoking and cancer of the uterine cervix, persisting after adjustment for other known causal factors, such as multiple sexual partners, sexually transmitted diseases, and early coitus.

Tobacco advertising and women

Although the tobacco industry claims that its advertising is aimed at current smokers in order to increase each company's market share, the consensus within the public health community is that advertising exerts significant influence on nonsmokers adopting the habit.[5]

Tobacco advertising aimed at women illustrates this point. Warner noted, "Among the most significant advertising trends in the past three decades has been the aggressive advertising of cigarettes marketed for women. The advertising campaign emerged well before, and led to, the diffusion of the habit within the target group (women)."[5]

Indeed, women became a target group of the tobacco industry during the 1920s and 1930s. Many of the popular advertising themes of this era persist today. Upward social mobility, sophistication, financial success, and independence remain strong messages, especially in advertising and promotional events geared toward blue-collar workers and African-Americans.[18] Blum has even stated that "the tobacco companies were the first to offer women equal rights."[12]

"The shock of facing what your figure may become... when tempted, reach for a Lucky instead of a sweet." 1930s era cigarette advertisement [12]

Early advertisements aimed at women touted cigarettes as a reliable method of weight control, a claim whose appeal continues today. Surveys of young adults have revealed that women smokers are substantially more concerned about weight gain if they quit smoking than are men (57.9% versus

26.3% expressing concern).[19] Several recent reports have established a relationship between weight gain and smoking cessation. However, major weight gain (greater than 13 kg) is likely to occur in only a minority of those who stop smoking, and the health benefits of quitting greatly exceed the risks of the usual amount of weight gain.[20,21]

Perhaps the most misleading theme in tobacco advertising, smoking as an element of a healthy lifestyle, has targeted women in a number of ways. The sponsorship of women's tennis events by the Phillip Morris company (makers of Virginia Slims cigarettes) provides the most notorious example. Not only does this sponsorship associate cigarettes with vigorous physical activity, but it circumvents the federal restrictions on broadcast advertising of tobacco products by keeping the product's name in the public eye. Other companies also use physical exercise in their advertisements and promotions: Vantage cigarette advertisements show models dancing, and Kent portrays models cooling down with a cigarette after a hard tennis game.[5]

Of all publications, women's magazines are most influenced in their coverage of smoking and health issues by tobacco advertising revenue. Studies from the 1970s inversely correlated the acceptance of cigarette advertisements with the frequency of articles with an anti-smoking theme published in women's magazines.[5] Small sample sizes and lack of statistical control limited these studies. A recently published, more rigorous statistical analysis of the relationship between cigarette advertising and the publication of articles in 99 US magazines on the risks of smoking over a 25 year period (1959–1969 and 1973–1986) revealed strong evidence that such advertising is associated with diminished coverage of smoking hazards, especially in women's magazines.[22]

Smoking control

"Smoking control" refers to efforts to limit smoking, either preventing smoking initiation or bringing about smoking cessation. Analogous to the public health model of interaction between agent, host, and environment as the cause of disease, we may say that smoking control seeks to limit smoking-related disease by modifying the agent—the cigarette; the host—the individual smoker or nonsmoker; and the environment—the surroundings that influence the individual.

"Alive with pleasure." 1992 Newport cigarette advertisement.

Agent. It is generally held that cigarettes have no recommended use and that "tobacco is the only major legal product that is hazardous when used as intended...."[23] Therefore, anti-smoking advocates see the elimination of tobacco production as the best method to control the agent of smoking-related disease. Short of this politically charged extreme, other agent-control strategies such as limiting access to tobacco, especially access by vulnerable populations such as adolescents, have recently gained prominence.

In 1990, the United States Department of Health and Human Services (USDHHS) recommended a model law—the Sale of Tobacco Products to Minors Act—to states and localities to prevent the sale of tobacco products to minors.[24] A key provision of this and of a number of bills before the Maryland General Assembly in the past two years places a ban or restriction on the use of cigarette vending machines. Increasing taxes on these products offers another method to reduce access to tobacco products. In addition to raising funds earmarked for the prevention of smoking-related diseases, increasing the price of cigarettes through taxes has been shown to decrease consumption in the United States, Canada, and other countries.[14,25]

Environment. Environmental strategies for smoking control include a variety of approaches ranging from changing the social environment to adopting tobacco-free policies in the workplace and school to restricting tobacco advertising. The common thread in these approaches is the manipulation of environmental cues to discourage smoking.

Smoking has lost its acceptance as a social norm. The surgeon general's 25th anniversary report noted that "the social acceptability of smoking in public is declining, as measured by the proportion of adults who find it annoying to be near a person smoking cigarettes. This proportion increased from 46% in 1964 to 69% in 1986." A once fashionable affectation promoted by celebrities, smoking is now widely regarded by both smokers and nonsmokers as a harmful addiction. Dr. Koop observed that "the ashtray is following the spittoon into oblivion."[1]

Tobacco-free policies accomplish several environmental smoking control objectives. Clearly, they reduce everyone's exposure to environmental tobacco smoke in schools, workplaces, hospitals, and other sites. In addition, these policies reinforce the social unacceptability of smoking by making smoking less apparent, and they may possibly help discourage some individuals from starting to use tobacco.[26] Since most smokers start in their teenage years, tobacco-free policies are especially important in schools. In Maryland, while state policy dictates that students may not smoke at school, only recently has the Maryland State Board of Education adopted a bylaw that will prohibit smoking by teachers, administrators, and staff.

One of the most pervasive environmental smoking control methods is the limiting of tobacco advertising. In 1985, the tobacco industry spent some 2.5 billion dollars on cigarette advertising; in 1986, the USDHHS spent only 39.5 million dollars on tobacco control. A recent theme issue of the *Journal of the American Medical Association* (*JAMA*) presented data leading to the conclusion that "cigarette advertising encourages youth to smoke and should be banned."[27] As already discussed in this article, advertising has a particularly strong effect on women. Several authorities have recommended limiting tobacco advertising to "tombstone" (unadorned) advertisements or point-of-sale advertisements. The anti-tobacco organization, Doctors Ought to Care (DOC),

goes a step further with its promotion of tobacco counteradvertising. DOC counteradvertisements parody well-known tobacco industry advertisements, pointing out that smoking is neither healthful, nor liberating, nor glamorous. DOC encourages physicians to avoid any unintentional endorsement of tobacco in their offices by subscribing to "smoke-free" magazines only. The *Maryland Medical Journal* February 1992 issue (page 119) lists such publications.

Host. Physicians can act upon the host to control smoking-related disease. All physicians should ask their patients if they smoke and they should record smoking status, recently termed "the new vital sign," in patients' charts.[28] Similar to vaccinating against infectious diseases, the physician can help nonsmoking patients by "psychologically inoculating" them against starting, by discussing with patients the adverse consequences of smoking, and by suggesting ways to resist cigarettes.[29,30]

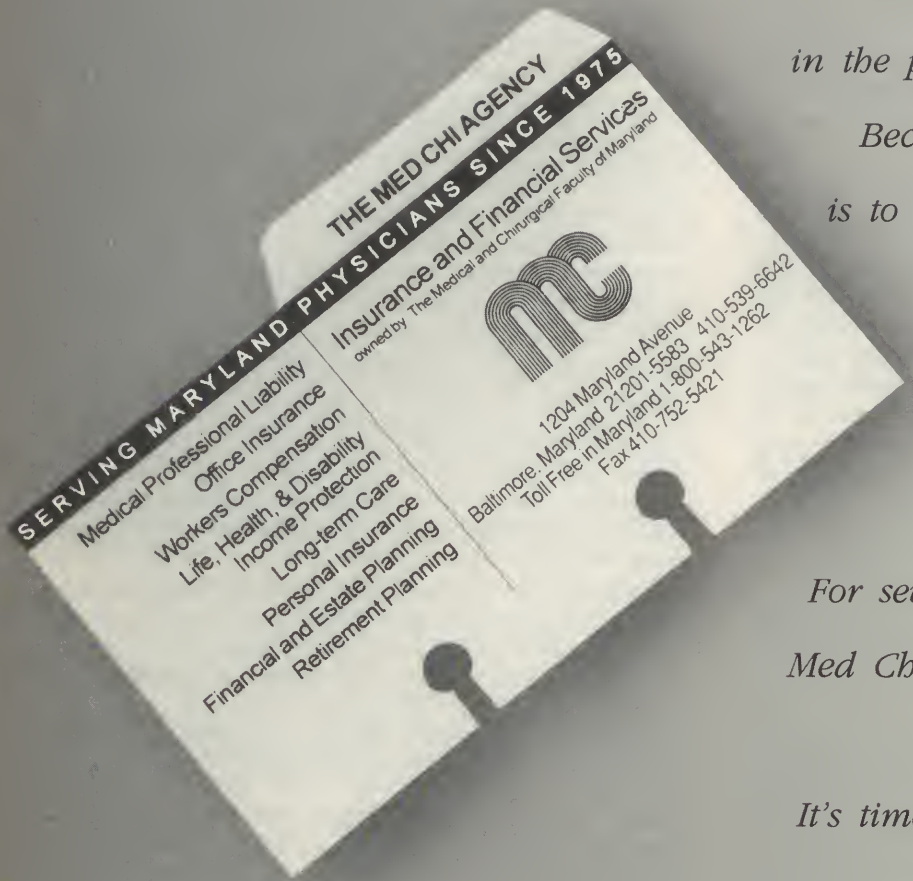
Physicians can help patients to quit smoking by using a number of simple strategies developed by the National Cancer Institute (NCI). The NCI suggests the **"Four A's"**:

- ***Ask*** your patients their smoking status at each visit.
- ***Advise*** your smoking patients to quit.
- ***Assist*** them by setting a quit date, giving self-help materials, and prescribing nicotine replacement therapy (gum or patch).
- ***Arrange*** follow-up appointments.

In randomized controlled clinical trials involving 700 physicians and 40,000 patients, this intervention alone has achieved a 10% quit rate at one year, compared with a 4% quit rate in the nonintervention group.[31] More information on the NCI strategy entitled "How to Help Your Patients Stop Smoking" may be obtained by calling 1-800-4-CANCER.

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HIV disease in pregnancy

Norman Levin, M.D.

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The years from 1981 to the present have seen a steady increase in the incidence of AIDS in the female population. The corollary increase in the incidence of AIDS in pregnancy increases the responsibility of the obstetrician to become aware of the effect of AIDS on pregnancy and the effect of pregnancy on AIDS.

Increasing incidence of AIDS in pregnant women

During the next year, an American obstetrician is more likely to provide care for a woman infected with human immunodeficiency virus (HIV) than for an eclamptic woman, a pregnant woman with sickle cell disease, or a pregnant woman infected with congenital herpes.[1] In 1990, the Centers for Disease Control (CDC) reported 43,339 AIDS (acquired immunodeficiency syndrome) cases—17.2 per 100,000 population. Women accounted for 11.5% of reported AIDS cases among adolescents and adults.[2] This increase in the incidence of AIDS in the female population from 7% in 1987 has a corollary in the increase in the incidence of AIDS in pregnancy.

Maryland currently has the seventh highest cumulative prevalence rate of AIDS cases in the United States. In April 1991, the CDC reported the Maryland incidence of AIDS as 21.2% per 100,000 population. The proportion of women with AIDS is also increasing locally.[3]

Increasing responsibility of obstetricians/gynecologists

Maryland law states that physicians cannot decline patients because of HIV infection. The American College of Obstetricians and Gynecologists has stated that every obstetrician should be prepared to provide care for HIV-positive women.[1] Clearly, the time when an obstetrician/gynecologist can view HIV disease as an exclusive purview of subspecialists in infectious diseases has passed.

Every obstetrician should be aware that a retrovirus (RNA virus) that can be incorporated into the host genome causes this disease. It preferentially affects T4 cells, "helper lymphocytes," macrophages, and cells of the central nervous system. The T4 lymphocytes—the central component of the immune system—stimulate T8 cells to have a cytotoxic effect on pathogens and stimulate B cells to produce antibodies. When the T4 cells are depleted, B cells are no longer initiated to produce these antibodies.[4]

This virus can lead to progressive debilitation of the immune system,

rendering the individual susceptible to opportunistic infections—for example, *Pneumocystis carinii pneumonia*, central nervous system toxoplasmosis, and neoplasia, such as Kaposi sarcoma and rectal sarcoma—that rarely affect patients with intact immune systems. The HIV-infected patient with one of several opportunistic infections, such as neoplasia, dementia, or wasting syndrome, is diagnosed as having AIDS.[4] A seropositive woman with a CD4 of less than 200 mm^3 is diagnosed as having AIDS, even though she may be asymptomatic.[5]

Obstetricians/gynecologists must recognize the resulting changes in their responsibilities brought on by this disease. They must incorporate the safer sex message into routine reproductive health care because strikingly high rates of HIV seropositivity in the presence of sexually transmitted disease have implicated sexually transmitted disease as a risk factor. In one study, a repeated cross-sectional survey of prostitutes with HIV revealed a 50% incidence of gonorrhea and a 30% rate of chlamydia and hemophilus infections. While 22% to 25% of individuals became infected with gonorrhea after only one exposure, less than 15% of those with one exposure to HIV become infected, with the average infection rate being .3%.[6] Although HIV is poorly transmitted sexually, physicians should make clear to their patients that HIV is always lethal.

Obstetricians/gynecologists should introduce counseling and HIV-testing programs in their offices and clinics. They should advise a woman who may have been exposed to the HIV virus that she may need to be tested more than once since antibody detection may not be possible for several months after exposure. Standard testing procedures should include an initial immunoassay (enzyme-linked immunoabsorbent assay or ELISA) followed by a confirmatory Western blot assay. The physician should not consider a test positive without first performing a confirmatory test, particularly in low risk populations.

Physicians must report all persons with symptomatic HIV infection to the Maryland State Department of Health and Mental Hygiene.[7] Pretest and posttest counseling and written informed consent, using a form consistent with state regulations, must accompany serological tests for HIV. The provider has the option of reporting to the local health department persons who irresponsibly place others at risk for HIV infections.[7]

Obstetricians/gynecologists must provide medically appropriate, humane, and culturally sensitive care for HIV-infected women during pregnancy. As they become more involved with counseling and testing programs, obstetricians must prepare to manage the pregnancies of women identified through those programs.[1]

Antepartum testing and counseling

An obstetrician encountering a pregnant woman infected with HIV must ensure that she receive appropriate counseling to enable her to make an informed choice regarding continuation of her pregnancy and to reduce her chance of transmitting the disease to others. Counseling must include the discussion of the impact of the virus on the pregnancy, neonatal transmission rates, pregnancy complication rates, and the effect of pregnancy on HIV disease progression.

If a patient elects to continue her pregnancy, the obstetrician should tailor antepartum care to her particular needs. In addition to routine prenatal testing for chlamydia, gonorrhea, and syphilis, the patient should receive testing for hepatitis B virus infection, mycobacterium tuberculosis, cytomegalovirus infection, and toxoplasmosis.[8]

Treatment of HIV-related infections during pregnancy

The effects of HIV infection on pregnancy are not completely understood. Cell-mediated immunity is physiologically depressed during pregnancy, with a nadir at eight weeks before delivery and a rapid rise just prior to delivery. The HIV-positive status appears to prevent the rise in CD4 cells that occurs normally in the last eight weeks of pregnancy and during the puerperium. A CD4 count below 200 indicates that the parturient woman's health is in extreme jeopardy as is the well-being of the fetus. Ill effects to the fetus may occur as a result of the mother's advanced immunodeficiency state, causing an unfavorable fetal environment and promoting direct viral infection in the fetus.

The obstetrician should strongly consider the merits of abortion in terms of hazard to the fetus or the mother, given a seropositive woman with a reduced CD4 count.[9] At our institution, we have performed abortions, after consultation, for an unregistered HIV-seropositive patient 22 weeks pregnant, despite a standing policy of refusing abortion to anyone beyond 20 weeks of pregnancy.

An HIV-positive pregnant woman should have CD4 counts done at least once a trimester; the higher risk pregnant patient should have CD4 counts done monthly.[8] When a patient has a CD4 count of 500 to 200 or less, which places her and her fetus at risk for opportunistic infections, she should receive antiviral treatment preferably beyond the first trimester of pregnancy—the period of fetal organogenesis.

Clinicians should be leery of nonspecific symptoms that they usually attribute to pregnancy. If the patient develops an HIV-related infection, the obstetrician should coordinate treatment in consultation with infectious disease experts. Physicians should not rule out such therapeutic agents as AZT (zidovudine), trimethoprim, acyclovir sodium, and pentamidine when an HIV-related infection indicates their use. Although these drugs cross the placental barrier, and their long-term effect on the baby remains unknown, no valid studies demonstrate that they cause an increase in fetal abnormalities.[8] In the presence of a life-threatening situation, the obstetrician should not withhold treatment regardless of the duration of the pregnancy.

Transmission of HIV infection to the fetus

Transmission of HIV can theoretically occur via three principal routes. It occurs *in utero* by way of transplacental passage, or it may occur at the time of birth through exposure to

maternal blood and body fluids. HIV has also appeared in the breast milk, and some reported cases of transmission are thought to have occurred during breast-feeding. In these cases, maternal acquisition of HIV occurred postpartum.[10] For each patient with AIDS, there are at any given time 20 to 30 asymptomatic individuals who may presumably remain seropositive for life and may inevitably show symptoms of AIDS. Blood has the highest concentration of HIV virus, with amniotic fluid and semen also ranking high. Although other body fluids, such as saliva, urine, feces, and tears, are known to carry the virus, transmission via these fluids is extremely rare or questionable.[10]

Numerous studies have suggested a rate of perinatal transmission of HIV anywhere between 13% and 50%, with a higher rate of transmission for those patients who have symptomatic HIV infection than for asymptomatic patients. Reports place the African rate as high at 50%, in Europe about 13% to 14%, and in the United States somewhere in between.[4,10,11]

Intrapartum care

Intrapartum care should focus on the prevention of the nosocomial spread of HIV. The obstetrician should exercise caution and should minimize direct skin contact with potentially infected secretions. Universal infection control measures should include the use of water repellant gowns, goggles, gloves, and boots during all deliveries. Caregivers should clear the neonate's posterior pharynx with wall-suction or motor-suction devices. Caregivers should never resheathe, bend, or break needles before discarding.

The care in labor is not substantially altered for an asymptomatic HIV-positive woman. As with the symptomatic patient, the obstetrician should avoid direct contact between the infected mother's vaginal secretions and fetal blood. Scalp blood sampling for fetal pH evaluation and scalp electrodes for monitoring fetal heart rate during labor and delivery could theoretically enhance an inoculation of virus into the neonate. Therefore, a physician should rely on external fetal-monitoring devices only.

The obstetrician should consider delivery by cesarean section for obstetrical indications only. In 10 cases, cesarean sections made no difference in the incidence of HIV occurring in the infant; all mothers did well. According to Minkoff, these asymptomatic mothers had no complications, but their infants had a significantly high incidence of prematurity and low birthweight.[12] These fetal complications may be due to the lifestyle of the mothers—that is their high incidence of infection, their drug use, and their poor nutritional status—rather than their HIV seropositive state. Other studies have failed to demonstrate an adverse effect on infants delivered to asymptomatic seropositive mothers.

Postpartum care

Postpartum counseling should include advice about future sexual relationships. The physician should make a strong plea for the use of abstinence, non-insertive sex, or, at a minimum, the use of condoms as a means of birth control. The use of spermicidal agents, such as nonoxynol-9, further reduces the sexual transmission of AIDS.[8,10] The physician should caution patients that the use of intrauterine devices, birth control pills, and sterilization do not protect against the transmission of AIDS. Since breast milk has been indicated as a transmission mode for HIV, the obstetrician should recommend against breast-feeding for an HIV-infected mother. Cord blood will contain the detectable maternally produced immunoglobulin G antibody to HIV, and infants may retain this maternally transmitted antibody for up to 15 months.[8,10] Thus conventional testing is not useful, but early detection of viral specific immunoglobulin A antibodies perinatally leads to earlier diagnosis of HIV infection.[13,14] The mother and infant should receive further evaluation by a specialist in infectious diseases who has a strong interest in the problems of AIDS.[15]

Asymptomatic HIV seropositive women, identified because their children developed HIV-related disease, have been followed up to 24 to 28 months postpartum. Between 45% and 75% of these women developed symptoms—a higher rate than the 13% to 34% reported for antibody-positive homosexual men, intravenous drug users, or hemophiliacs who, when longitudinally studied for up to six years, have developed AIDS.[1] Hormones of pregnancy such as human chorionic gonadotrophin, estrogen, progesterone, alphafetoprotein, corticosteroids, prolactin, and alphaglobulin have immunosuppressive effects *in vitro* and may play a role in these statistics.[10,16–18]

HIV-infected children

The demographics of the pediatric AIDS population closely parallels that for women, with more cases occurring in African-American and Hispanic populations. As of April 1988, nearly 1,000 cases of AIDS in children under the age of 15 had been reported. Seventy-five percent of those children acquired the disease from their HIV-infected mothers, most of whom were either partners of intravenous (IV) drug addicts or were themselves IV drug addicts.[10]

Minkoff reported on 34 children with AIDS acquired as a result of a seropositive HIV mother. Few of the mothers (4 of 32) were symptomatic; however, low birthweight (11 of 34 preterm births) and premature rupture of the membranes were common.[12]

In Maryland, the results from a 1989 survey indicated that 42 of every 10,000 children born were HIV infected, representing a 35% increase over a similar survey in 1988. These results forecast double tragedies. Approximately 30% of these children will themselves be infected, and the overwhelming majority will lose their mothers long before they reach maturity.[3,19,20] According to Lindsay et al, unregistered inner city parturient women are significantly more likely to be seropositive for HIV than registered parturient women.[11]

The infected child has an extremely poor prognosis, particularly the infant who develops detectable clinical illness within the first six months of life. These babies rarely survive

beyond one year of age. Most newborns will develop symptoms within the first or second year of life although, according to reports, delays have occurred to age 11.[10]

Conclusion

The incidence of AIDS has steadily increased over the past decade in the general population and, more significantly for the obstetrician, among women of childbearing age. The obstetrician bears the responsibility of staying abreast of the ever-increasing knowledge of the effect of AIDS on these women, on the course of their pregnancies, and on their infants.

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The history of brucellosis in Maryland and the District of Columbia

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The history of brucellosis began in Europe; however, a number of early studies and publications originated in medical centers in Maryland and the District of Columbia. As a result of efforts by researchers in these locales, physicians came to understand the transmission of the disease, and continued clinical investigations helped to develop significant therapeutic and preventive measures that have made brucellosis a rare disease in the United States.

Brucellosis, characterized by fever, sweats, weakness, malaise and weight loss, is an infectious disease transmitted to humans from animals or animal products containing bacteria of the genus *Brucella.*[1] The disease also goes by the names Mediterranean fever, gastric intermittent fever, Malta fever, or undulant fever in humans; in cattle, it bears the name Bang's disease for the Danish veterinarian who isolated the bacteria that causes it.

The earliest records of brucellosis originated in Europe in the middle of the 19th century. The disease was not recognized in the United States until the beginning of this century when a number of early studies and publications originated in medical centers in Maryland and the District of Columbia. Scientists at Johns Hopkins, at the National Institutes of Health, and at Fort Detrick in Frederick County carried out significant investigations of brucellosis.[1] As a result of their efforts, the disease, which had become fairly common by mid-century, is now rarely encountered in this country.

19th century reports on brucellosis in Europe

The history of brucellosis began on the Isle of Malta where, in 1861, Assistant Surgeon J.A. Marston of the Royal Artillery Station, gave the first clinical description of the disease.[2] In his "Report on Fever (Malta)," he gave a long discussion of the febrile illness, naming the condition Mediterranean or gastric intermittent fever. He described the clinical picture and course of the disease in minute detail, and he clearly noted many of the complications encountered in a large series of cases.

Another important milestone in the history of brucellosis also occurred in Malta. In 1887, Assistant Surgeon David Bruce, stationed in Valetta, Malta, found the causal organism in the spleen of a British soldier who had died of the disease. Further study revealed that "In all cases of Malta fever, there was found a minute, berry-shaped bacterium" referred to as micrococcus melitensis.[3]

In 1895, Professor Barnhard Lauritis Frederick Bang, a veterinarian pathologist in Copenhagen, found the cause of infectious abortion in

cattle while studying a herd of cattle in Fredericksborg, Denmark.[4] He was able to culture a small gram-negative bacillus from the fetal envelopes of an aborting calf and, using noninfected cows, was able to fulfill Koch's postulate. This organism we now know as *B. abortus*.

W.W. Spink, I.F Huddleson, E.J. Young, M.J. Corbel, and, more recently, H. Mochmann and W. Koehler, have thoroughly reviewed the history of these 19th century European discoveries.[5–8]

Recognition of brucellosis in Maryland and the District of Columbia

In American medical literature, Dr. William Osler wrote the earliest discussion of brucellosis one hundred years ago in his *Principles and Practice of Medicine*.[9] Under the heading "Infectious Disease of Doubtful Nature," he noted that Bruce "has described the presence of a micrococcus in the spleen" as the cause. He also mentioned, "on the other hand, it held to be a fever due to chronic poisoning from fecal emanations."

In 1903, W.B. Bannister, an army surgeon stationed in Washington, DC, wrote the first case report of brucellosis in the American medical literature.[10] Having previously observed the disease while in the Philippines when a fellow surgeon developed the infection following a laboratory accident, his report concerned a soldier recently transferred from the Philippine Islands. The patient's history revealed that "a short time before taking to his bed with fever, he had been working with a culture of micrococcus melitensis in the army medical school laboratory."[10]

Examinations for malaria and typhoid proved negative. Quinine had no effect on the fever, but "the serum reaction, however, with the micrococcus melitensis was most decided as evidenced by marked agglutination."[10] Bannister did not obtain blood cultures as he believed at that time that the infection was confined to the spleen. Despite the history of exposure and positive specific serology, the author concluded that this case "was imported."[10]

During these early years of the 20th century, before specific antimicrobial therapy became available, treatment of brucellosis was symptomatic and empiric. In addition to the usual supportive measures, F.J.A. Dalton advised some form of febrifuge mixture or an intestinal antiseptic. He wrote, "I have generally found Burney Yeo's chlorinated quinine mixture the most suitable."[11] Empiric treatment included vaccines, chemicals such as neoarsphenamine, convalescent serum, brucellin, hyperthermia, whole blood, and sterile milk injections.

Also in 1903, C.F. Craig, like Dr. Bannister an army surgeon who had served in the Philippines, reported that he had received cultures of micrococcus melitensis through the courtesy of Professor William Welch of Johns Hopkins University.[12] Craig used these cultures in making the specific agglutination tests recently described by Almroth Wright and his colleagues.[13]

Two years later, in 1905, Dr. Craig reported the case of a a nurse who lived in the District of Columbia and worked in a local hospital. This patient developed the disease without any known source of infection. Dr. Craig suggested the probability of a much wider distribution of brucellosis and advised that the serum test be used in all cases of fever of unknown origin.[14]

Also in 1905, the voyage of the SS *Joshua Nicholson* led to a significant discovery about the transmission of brucellosis from animals to man.[6] Mr. G.F. Thompson, an agent of the Bureau of Animal Industry in Washington, DC, sailed to Malta to secure a herd of select goats to improve the "flesh and fleece" of the caprine industry in the United States.[6]

With three Maltese goatherds and 65 choice animals, Mr. Thompson left Malta in August 1905 on the SS *Joshua Nicholson* bound for Antwerp. The ship's captain reported that Mr. Thompson was ill on this voyage. On arrival in Antwerp, the goats were quarantined before boarding another ship, the SS *St. Andrew,* destined for New York. During the voyage to New York, at least four of the goats died, and, on arrival, the survivors were again quarantined at Athens, New Jersey; eventually all were destroyed due to infection.[6]

Passengers and crew members of both the SS *Joshua Nicholson* and the SS *St. Andrew* drank raw milk from the goats; many came down with fever during and after the voyage. Those who did not drink milk and a German chef who boiled his milk before drinking it remained well. Several months after the voyage, Mr. Thompson died of "influenza pneumonia."[6]

In 1911, E.C. Schroeder and W.E. Cotton of the Department of Animal Industry demonstrated the presence of *B. abortus* in raw milk.[15] While testing for the presence of bovine tubercle bacilli by injecting contaminated milk into guinea pigs, Schroeder and Cotton showed the pathogenicity of *B. abortus* for this specific laboratory animal.

The work of Alice Evans at the National Institutes of Health

Alice Evans, a bacteriologist on the staff of the Hygienic Laboratories of the United States Public Health Service and one of the most dedicated and productive workers in the field of brucellosis research, investigated the disease in humans and animals for over three decades. Previously assigned to the Dairy Division of the Bureau of Animal Industry, she began her work as one of the first women employed at the National Institutes of Health (NIH) in 1917.[16]

Since *B. abortus* and *B. melitensis* were both found in raw milk, Evans focused her attention on these two organisms. She noted morphological and biochemical similarities of *B. abortus* and *B. melitensis* and their similar staining reactions (gram-negative), which ordinary serum agglutination tests could not distinguish. Her experiments enabled her to form the concept that *B. abortus* found in cattle caused a form of brucellosis in humans. Evans gave credit to Dr. Adolph Eichhorn, a pathologist, for help in formulating this idea.[17]

Alice Evans presented her findings at the annual meeting

of the Society of American Bacteriologists held in Washington, DC in December 1917.[17] The results encountered skepticism, which persisted for seven years. Theobold Smith, a leading authority on the subject of human and bovine tuberculosis, "continued to deplore the confusion caused by what he considered hasty publication."[18] Even her colleagues at the Hygienic Laboratories did not believe in the accuracy of the results of Evan's investigation. (Dr. Harry Schoening confirmed this in a discussion at a meeting of the Bacteriological Seminar held at the University of Maryland on June 7, 1945.)[18] However, Smith subsequently changed his opinion and continued to encourage Evans in her research.

In 1922, Alice Evans developed a mild case of brucellosis following a laboratory accident. For nine months, repeated examinations failed to reveal any cause for complaints, and her physicians diagnosed neurasthenia. Subsequently, she experienced an acute episode, and a blood culture revealed *B. melitensis.* However, over the next five years, with admissions to four different hospitals for observation, the diagnosis of neurasthenia persisted. Finally, during an operation for another condition, lesions found at surgery produced a pure culture of *B. melitensis.*[18]

An early case reported from Johns Hopkins

Seventy-one years ago, Dr. Chester Keefer, while an intern on the Osler Medical Service at Johns Hopkins, recognized and later reported the first human case of brucellosis caused by a *brucella* species other than melitensis.[19] The patient (Med. No. 48513), a young technician in the medical school's Department of Histology, developed a clinical picture typical of brucellosis. His history revealed that he regularly consumed large quantities of raw milk and cheese. Immediately prior to the onset of his illness, he had transported several pig embryos from a local abattoir.

During hospitalization, 13 blood cultures over a period of 67 days all showed the presence of a small gram-negative bacillus. The bacteria resembled micrococcus melitensis morphologically, and specific agglutination reactions confirmed the diagnosis of brucellosis.

Dr. Keefer's report, published in 1924, masterfully describes the clinical course of the disease; his meticulous laboratory studies thoroughly document the diagnosis. Colonel C.F. Craig of the Army Medical School, who as mentioned had collaborated with Dr. William Welch of Johns Hopkins, supplied the serum and cultures that Dr. Keefer used to confirm the diagnosis.

Dr. Keefer's patient, while hospitalized, stimulated a great deal of interest within the faculty of Johns Hopkins. Florence Sabin of the Department of Anatomy, together with H.S. Amoss, a pathologist, contributed to several studies accomplished during the patient's hospitalization.[20] Sabin used the patient's blood for her classic supravital staining investigations. She noted that the brucella organism was a monocytic antigen. As a result, Dr. Amoss prepared an auto-vaccine, which the patient received at four- to five-day intervals. This enabled Sabin to comment: "The entire life cycle of the monocytic strain from the youngest of the dying cells could be seen in one preparation."[20] She also directly observed the monocytes role as a phagocyte.

Therapy during this period in this country and in Europe included use of Mercurochrome (merbromin) intravenously. This treatment met with no success.[21] In 1929, Dr. Benjamin Baker showed that brucella could cause intermittent hydrarthrosis.[22] He treated his patient with convalescent serum from Keefer's patient and "the improvement was striking."[22]

Dr. Amoss pursued his interest in the case, reporting in 1929 on his success at isolating brucella repeatedly from the patient's stool, as well as from his blood.[23] One culture (No.455) he sent to Alice Evans who eventually identified the organism as *B. suis.* This was the first human case of proved brucella infection other than melitensis. While at Hopkins and later at Duke University, Dr. Amoss isolated brucella from urine and bile; he obtained a pure culture from an ovarian cyst in a patient with chronic brucellosis who was operated on by Dr. Richard TeLinde.[24]

Also from Johns Hopkins, Charles Wainwright reviewed the subject of brucellosis at a meeting of the Southern Medical Association in 1928, and in a 1929 report, he added 11 new cases that had originated in Maryland.[25] He later employed neoarsphenamine in the treatment of the disease but found it ineffective.[26]

The 1930s: A Maryland epidemic and attempted therapies

W.R. Cameron and M. Wells reported that from 1929 to 1932, the health officer of Washington County, Maryland received reports of 46 cases of brucellosis.[27] Twenty-three patients lived in Hagerstown, and 23 resided on adjacent farms or in nearby small towns. They all drank raw milk and cream.

Epidemiological investigation traced the source of the infections to local dairies that sold raw milk and dairy products from infected herds. Investigators tested a total of 8,226 samples of milk serum from 38 herds; they found infection in 50% of the cows. In Hagerstown, a program to pasteurize all dairy products and eliminate infected animals proved successful, but similar measures failed in the rural areas.[27]

Research in this decade included a report in 1936 by Drs. Wainwright and L. Hamman. These investigators reported the results of their re-examination of 36 patients with long-continued, low-grade fever.[28] Eventually, 10 patients received an accurate diagnosis. Of these, three had chronic brucellosis. The report gave a detailed description of one of these cases.

In 1938, sulfanilamide was first used as therapy, and early forms of streptomycin and penicillin were tried with unfavorable results.[29]

World War II research at Fort Detrick

During World War II, Fort Detrick in Frederick, Maryland became a major center for brucellosis research. Work began

in November 1942 when the Chemical Warfare Service assumed responsibility for biological warfare research.[30]

Outstanding national and international scientists, both military and civilian, worked as full-time investigators and consultants "in the deepest wartime secrecy, matched only by that which enveloped the Manhattan Project for developing the A-bomb."[30]

After preliminary experiments on various pathogens, brucellae emerged as ideal candidates for use in biological warfare because of their high morbidity and low mortality rates, and a highly contagious nature. Investigators chose *B. suis* as the principal organism for possible development as an offensive weapon. Its relative ease of cultivation and capability to grow in primary isolation without increased carbon dioxide in its environment made it a suitable choice.[30]

From May 1944 to September 1945, investigators used a strain designated S (Huddleson 1882-A) in various experiments and field trials. Strain S1, derived from a single colony in 1920 and carried in serial transfer up to 1945 without genetic or colonial change, showed unusual stability. In addition, investigators used a genetically altered avirulent strain of *Serratia marcescens* to simulate *B. suis* in aerosol studies.[30]

Improved media allowed cultivation on a commercial scale without loss of virulence; specially designed equipment safely preserved the organism over long periods of time. Scientists produced large quantities of freeze-dried, concentrated brucellae in Pine Bluff, Arkansas, and they carried out field trials in Dugway, Utah.[31]

Scientists also directed much effort toward defensive measures to protect the armed forces and civilian population. They developed vaccines using ordinary media and yolk sac extracts of infected eggs. They instituted specific therapeutic trials with penicillin, sulfadiazine, and streptomycin, but none of these agents proved effective.[30]

Post-war studies and events

Although many scientific and clinical studies resulting from the wartime research appeared in medical literature, a large number remain classified. Neither the total number of completed studies nor their results may ever be known. However, several notable publications merit distinction as classics in the field of brucellosis research.

Included in this group is a 1947 report by G. Howe et al on 17 laboratory workers treated for acute brucellosis at the Station Hospital in Fort Detrick.[32] These workers, who contracted the disease early while engaged in investigative work, afforded a unique opportunity to observe the course of the infection from its onset and to observe the response to several chemotherapeutic agents in clinical trials. All of the patients had been thoroughly evaluated serologically and had been vaccinated prior to infection. Treatment again included penicillin, sulfadiazine, and streptomycin, used alone or in combination, again with no notable clinical response.[32]

In 1948, S.S. Elberg and D.W. Henderson, two senior investigators, for the first time documented the respiratory pathogenicity of brucella.[33] They used newly developed, sophisticated, aerosol methods to measure and deliver critical particle size, maintain virulence, and assure complete safety during the testing phase. The investigators concluded, "the respiratory route is little less effective than parenteral injections."[33]

From 1945 to 1956, in a well-planned three-part study, R.W. Trever, L.E. Cluff, J.R Imboden, and coworkers from Johns Hopkins, reported on the problem of chronic brucellosis.[34–36] They confirmed Spink's observation that chronic brucellosis occurs in a certain percentage of patients who recover from acute infection, but who continue with poor health for one or more years.[5] Their report analyzed in detail the cases of 60 laboratory workers who had contracted acute brucellosis at Fort Detrick from 1945 to 1956. Twenty-four of the original patients were available for follow-up study four to eight years after the acute episode. Sixteen of these patients had symptoms of poor health without any demonstrable physical abnormalities.[35]

The investigators gave a battery of psychological tests and psychiatric interviews to each member of the study. They concluded that the findings supported the view that emotional disturbance is the vital component of "chronic brucellosis" and is related to pre-illness personality structure and concurrent life situation.[36]

In 1944 and 1945, Alan Wood and Jack Guyton of the Wilmer Institute discussed the role of brucellosis in uveitis, and Wood reported five cases of nummular keratitis presumed due to brucella.[37,38] He produced "exactly similar lesions" in rabbits with local applications of live brucella organisms.[37]

Despite the skeptical reception that her findings had received in 1917, Alice Evans continued her investigations of brucellosis until her retirement from NIH in 1948. As already noted, she confirmed the first human case due to a brucella other than melitensis from a culture from Dr. Keefer's patient at Johns Hopkins. The first human case due to *B. abortus* came from nearby Clarendon, Virginia. Evans discussed her findings and her personal encounter with chronic brucellosis in her review, "Brucellosis in the United States," published in 1947.[18]

A second epidemic of brucellosis in Maryland occurred in Federalsburg on the Eastern Shore in 1946.[39] J.R. Steele and J.W. Hastings reported in 1948 on a two-month period in early 1946, during which 28 cases of brucellosis occurred. The authors state that it was the first large epidemic reported due to *B. abortus*. The source was raw milk from an uninspected herd of cattle. Certified milk usually sold by a local dairy became unavailable over the 1945 Christmas season, and raw milk from an uninspected herd of cattle caused the epidemic.

Therapy for brucellosis made great strides in the decade of the forties. In 1947, the two most promising antibiotics, Chloromycetin (chloramphenicol) and Aureomycin (chlortetracycline) became available almost simultaneously. Scientists at the University of Maryland and Johns Hopkins Hospital completed studies and published within a remarkable short period of 18 months.

In 1948, Byer et al, in early clinical trials of chlortetracycline, successfully treated a brucellosis patient. From the treatment of four additional patients, Byer and his colleagues concluded, "Laboratory and clinical observation in these five cases of brucellosis would suggest that Aureomycin is an effective chemotherapeutic agent in this disease."[40]

In a 1949 review of the benefits of chloramphenicol, Woodward described the treatment of eight patients who had acquired infection in Maryland.[41] All of the cases showed prompt and sustained clinical response. Five other patients received chlortetracycline treatment with similar results. Woodward concluded, "Slightly better results have been obtained in our hands with Chloromycetin [chloramphenicol] from the point of view of temperature response, with a mean fever duration of 2.4 days after beginning treatment."[41]

Also in 1949, in a report on the specific use of chloramphenicol in brucellosis, Woodward and Smadel pointed out Goodpasture's observation that brucellae are obligate, intercellular parasites that multiply within cytoplasm of the ectodermal cells.[42] This suggested chloramphenicol as an ideal therapeutic agent because of its ability to penetrate infected cells. Within a period of eight months, Woodward and Smadel were able to treat nine patients from Maryland with this antimicrobial. They achieved specific beneficial effect without an incidence of relapse.

Tetracycline remains the drug of choice in the treatment of brucellosis. Streptomycin or another aminoglycoside, as well as rifampin, may serve as an additive antibiotic.

Conclusion

Prior to 1925, the Centers for Disease Control (CDC) recorded a total of 128 cases of brucellosis in the United States.[43] In 1947, the CDC received reports of 6,321 patients, the peak incidence of reported cases. The year 1990 saw a total of 85 cases recorded, an incidence of 0.03/100,000.[44]

Pasteurization of milk and dairy products, together with the United States Department of Agriculture Eradication Program, have controlled brucellosis in this country almost to the complete disappearance of the disease in humans and in domestic animals, a notable accomplishment in the field of preventive medicine.

The diagnosis of brucellosis has become difficult because of its rarity and protean nature. A statement made by Keefer 70 years ago is appropriate today: "The infrequency of this infection in the United States and particularly in the East, the difficulties in the diagnosis of sporadic cases, and the importance of recognizing such cases seem to warrant this report."[19]

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Giardiasis: A case report and discussion of outbreaks in the United States

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Outbreaks of giardiasis occur every year in the United States, and waterborne infections appear to be increasing. Accurate identification of cases, proper hygiene in day-care and institutional settings, and adequate treatment of water sources will allow better control of this disease.

Case study

The patient is a 37-year-old female who had been in good health until July 1991 when she vacationed in the Bahamas. Approximately three weeks after returning home, she began to experience diarrhea, flatulence, abdominal distention, and cramping. These symptoms persisted along with episodic malaise, fatigue, and occasional headaches. Periods of wellness and normal bowel habits alternated with periods of malaise and diarrhea. When the patient presented in November 1991, the physical examination was normal. Laboratory examination of a formed, fresh stool sample revealed the presence of moderate numbers of *Giardia lamblia* cysts by wet mount examination and trichrome stain. White blood cells were not observed in the stool sample. The *Giardia lamblia* serum antibody test was positive with a titer of 1:32. The patient was treated with a seven-day course of metronidazole with subsequent resolution of symptoms.

Discussion

Giardiasis is the most common protozoal infection of the human intestinal tract.[1] It is well known that *Giardia lamblia* is a common agent of "travelers' diarrhea," and the case that is described above represents a common occurrence. Although many people are aware that only bottled or boiled water should be consumed when traveling to endemic areas, such precautions can be inconvenient for travelers.

Giardia lamblia is a flagellated protozoan that is found worldwide. While the prevalence is greatest in developing countries, it is also widely found in the United States. Prevalence rates in certain areas of the United States have been found to be as high as 16%.[1] There have been 95 outbreaks reported in the United States over the last 25 years, and the incidence appears to be increasing.[2,3] In Maryland, physicians and

laboratories are not required to report single cases of giardiasis. Therefore, the number of cases of giardiasis that are reported to the Maryland Department of Health and Mental Hygiene (DHMH) underestimate the true incidence of disease. In 1990, 58 cases of giardiasis were reported to the Maryland DHMH; in 1991, 89 cases were reported; and 15 cases were reported in the first quarter of 1992. Outbreaks of giardiasis are, however, reportable, and from January 1990 to March 1992, four outbreaks were reported in Maryland.

Giardiasis is most frequently acquired through consumption of contaminated water. In one of the recent Maryland outbreaks, a wading pool was suggested as the source of infection. Several outbreaks in the United States have been traced to the use of surface waters that were treated by faulty purification systems or by inadequate chlorination without adequate filtration.[3] In Vermont, where the incidence of giardiasis is higher than in other reporting states, infection rates were found to be elevated at higher elevations where water supplies are difficult to protect from contamination.[4] Untreated mountain stream water can transmit giardiasis to hikers. In 1983, an outbreak occurred among a group of students and faculty participating in a geology field course in Colorado who had consumed untreated stream water at their campsite.[5] In this outbreak, 31 of 40 people who consumed the stream water developed giardiasis.

Food sources have been documented in a few outbreaks of giardiasis.[6] A recent outbreak occurred in southern New Jersey, where 9 of 25 people who attended a family party contracted giardiasis.[7] The source of infection appeared to have been contaminated fruit salad. Health department investigators discovered that the person who prepared the fruit salad had a child in diapers, as well as a pet rabbit at home—both of whom were positive for *Giardia lamblia.* Taco ingredients were implicated as the source of infection in a 1988 outbreak among a church youth group in Albuquerque, New Mexico.[8] It was speculated that the vegetable ingredients of the tacos may have been washed with contaminated water or that the individual who prepared the tacos may have contaminated the food during preparation.

Person-to person transmission has received increasing attention recently, with outbreaks occurring in day-care centers, schools, and other institutional settings.[9,10] In two of the recent Maryland outbreaks, person-to-person transmission was identified as the mode of transmission in household/day-care settings. In Minnesota, 88 cases of giardiasis occurred in a six-week period among residents and employees of a nursing home and day-care children participating in an "adopt-a-grandparent" program.[10] There was a significant association between illness and physical contact with the day-care children, suggesting person-to-person transmission. In addition, transmission by food seemed to have occurred, since there was a strong association between sandwich consumption and illness, whereas individuals on a puréed diet were not infected. Person-to-person transmission may occur quite readily, due to the fact that as few as 10 organisms are required to establish an infection.[11] Along with other parasitic intestinal infections, giardiasis can be sexually transmitted through the oral-anal route. The incidence of animal-to-human transmission is not known; however, recent studies have shown a high prevalence of *Giardia lamblia* in domestic dogs and cats.[12]

Diagnosis

Giardiasis should be strongly suspected in a patient who develops symptoms between one and four weeks after returning from an endemic area. Other forms of travelers' diarrhea, such as that caused by enterotoxigenic *Escherichia coli,* have a much shorter incubation period. The diagnosis of giardiasis should be considered in any patient who has a history of prolonged diarrhea, malabsorption, or weight loss, regardless of travel history. Microscopic demonstration of the organism in stool, duodenal fluid, or a jejunal biopsy specimen clearly establishes the diagnosis. Detection of *Giardia* in stool samples in the laboratory is optimized through cyst concentration techniques. However, due to the intermittent pattern of cyst excretion, this approach will not detect all infections. These techniques will typically identify *Giardia* in only about 50%–60% of patients, even when multiple stools are examined. It is important to recognize that continued negative stool examinations do not rule out *G. lamblia* as the causative agent. Duodenal fluid examination may be indicated when stool examination does not reveal the presence of the cystic form of the parasite. The Entero-Test (Health Development Corp., Palo Alto, California) is a commercially available device that facilitates "string test" sampling of duodenal contents. This device consists of a gelatin capsule containing a string that is taped to the patient's cheek. The patient swallows the capsule, the capsule dissolves in the stomach and the string reaches the jejunum within approximately four hours. The string is then pulled out through the mouth, and the attached mucous is examined microscopically for trophozoites. Direct detection of *Giardia* antigens in feces can now be performed by enzyme immunoassay, and this has demonstrated greater sensitivity than microscopic methods.[13] Specific DNA (deoxyribonucleic acid) probes for *Giardia* have been developed.[14] However, these have not yet been applied to routine diagnosis.

An indirect immunofluorescent assay (IFA) test is available for the detection of serum antibodies to *Giardia.* Most patients with giardiasis produce significant levels of antibody, and titers may correlate with the duration of infection.[15] The predictive value of a negative result is excellent; however, a low positive titer cannot be interpreted as diagnostic, since many uninfected individuals may possess cross-reactive antibodies.[16]

Treatment and prevention

Treatment is recommended in acute cases as well as in asymptomatic carriers. Quinacrine hydrochloride is the most effective drug for treatment of giardiasis and is given in doses of 100 mg three times a day for seven days for adults and 2

mg/kg three times a day for children.[17,18] The cure rate with quinacrine is 90% to 95%. Common side effects include intestinal upset, headache, and yellowing of urine. Less frequently, nausea, vomiting, diarrhea, fever, and rash may occur. In approximately 1.5% of adults, toxic psychosis occurs. Metronidazole yields a lower cure rate (85%–95%), but is better tolerated than quinacrine.[17–19] Metronidazole is given in doses of 250 mg three times a day for seven days for adults and 5 mg/kg three times a day for seven days for children. Side effects include gastrointestinal symptoms, darkening of the urine, and opportunistic overgrowth of *Candida* in the bowel. Taken with alcohol, both quinacrine and metronidazole can give a disulfiram (Antabuse)–like effect. The cost of seven-day regimens of quinacrine or metronidazole are currently approximately $12.00 and $7.00, respectively. Furazolidone is available in liquid form, and is therefore useful for infants and young children. It has an efficacy of 75% to 90% when given in a dosage of 1.25 mg/kg four times a day for seven days.[19] Side effects include gastrointestinal symptoms and mild hemolysis in G6PD-deficient individuals. All of these drugs are regarded as being potentially unsafe in pregnancy. When treatment becomes necessary in a pregnant woman, however, the high cure rate of quinacrine makes it the drug of choice. All patients should be evaluated for cure by testing three stool specimens approximately one month after completion of treatment.

While there is evidence that over-the-counter bismuth subsalicylate (Pepto-Bismol) has a protective effect against some bacterial agents of travelers' diarrhea,[20] there are currently no measures available for *Giardia* prophylaxis.

Control of waterborne giardiasis relies upon proper management of surface waters, and federal regulations mandate that surface waters be treated to achieve at least a reduction of 10^{-3} of *Giardia* cysts.[21] High standards of water purification methods, including sedimentation, filtration, and chlorination of water sources, will ensure minimal risk to populations. The US Environmental Protection Agency has recommended that an acceptable level of safety for drinking water is one that ensures a maximum yearly risk of infection of 1 in 10,000, and a model has been developed that facilitates the estimation of this risk after consumption of water containing varying levels of *Giardia* cysts.[3]

Maryland is currently enforcing federal drinking water regulations, set forth in the Maryland Code of Regulations, Quality of Drinking Water. The Surface Water Treatment Rule applies to unfiltered public water supplies and requires filtered supplies to meet stringent turbidity and disinfection criteria.[21] Compared with other states, Maryland has fewer unfiltered surface water supplies: only seven supplies are unfiltered (all located in western Maryland), and no water supplies in large cities are unfiltered. Public water systems that use surface water and those that use ground water under the influence of surface water must either install filters or must meet criteria that will avoid filtration. For example, if raw water quality is high, disinfection alone may be sufficient to achieve an adequate reduction in *Giardia.*

Routine testing for water quality in Maryland does not include testing for *Giardia.* Lack of experience and equipment in both the field and the laboratory can contribute to the difficulties in recovering *Giardia* from water samples. To test for *Giardia,* large amounts (a minimum of 100 gallons) of water must be passed through a micropore filter before sending the filter to the laboratory for further washing, extraction, and examination. Since 1989, none of the 94 water samples processed in the DHMH Microbiology Laboratory have yielded *Giardia;* however, only small amounts of water and no filters were submitted.

Public education efforts are needed to inform the public of practices that can minimize the spread of infection. Travelers to highly endemic areas should avoid consumption of tap water, uncooked foods, and foods that may have been prepared in contaminated water, and campers should boil drinking water for 10 minutes before consumption. The spread of infection through day-care settings presents a major problem. Day-care workers and parents of young children in day-care settings need guidance on standards of hygiene practices. Accurate diagnosis and treatment of infected individuals are critical, and more sensitive approaches to the detection of the organism may permit better control of giardiasis.

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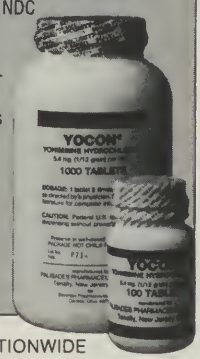
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The homes of the Medical and Chirurgical Faculty of Maryland

Joseph M. Miller, M.D.

Dr. Miller is a retired surgeon from Timonium, Maryland.

Through its almost 200-year existence, the Med Chi Faculty has met in numerous locations in Annapolis and Baltimore. The building at 1211 Cathedral Street has been its home for 84 years.

The approach of the bicentennial of the Medical and Chirurgical Faculty of Maryland (1999) invited a retrospective glance at the sites that have been Med Chi's home during the last two centuries. Interestingly, the first serious attempt at organization was a call to the physicians of the state to meet at Stark's Tavern in Baltimore in December 1789.[1-3] Preliminary discussions led to a charter by the state, and the first formal meeting of the Faculty in Annapolis—probably in one of the two legislative halls there.

Regular assemblages then took place on a biennial schedule in Annapolis. In 1805, the place of meeting was transferred to Baltimore



Figure 1. The cornerstone of the Athenaeum was laid in 1824, and a Faculty meeting was held there in 1827. Burned in 1835, the structure was subsequently rebuilt. (From *Picture of Baltimore.* Baltimore: F. Lucas, 1832. Courtesy of the Enoch Pratt Free Library of Baltimore.)

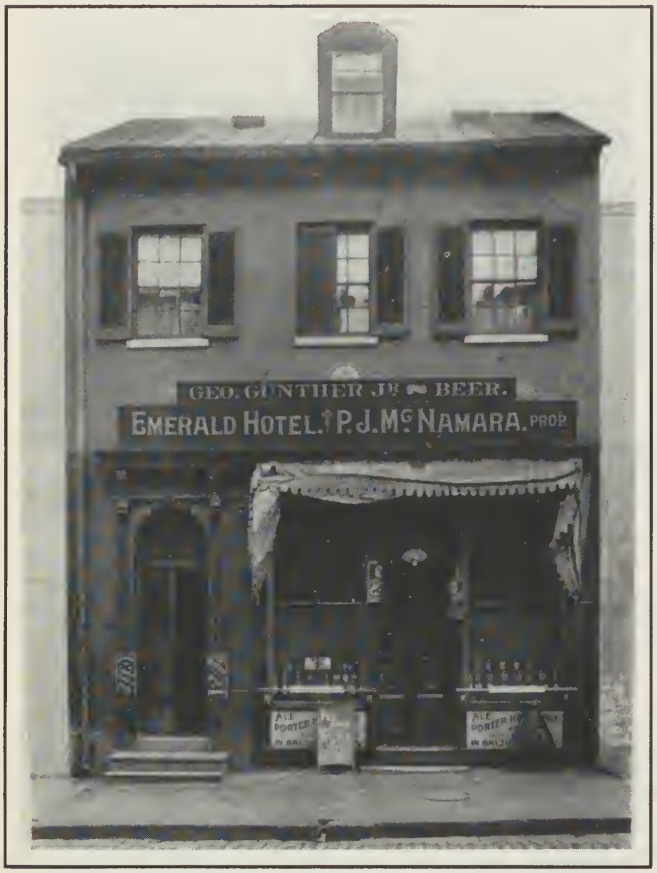


Figure 2. The house with two stories and an attic was built on a lot measuring 25 by 100 feet. The second story front was used for meetings, while the back was the library. The first floor was rented to lodgers.

and, as interest in the Faculty grew, annual conventions were initiated in 1817. Early on, sessions were held wherever a suitable hall could be found: Williamson's Hotel; Mr. Barney's Hotel; the University of Maryland; the Athenaeum (**Figure 1**); and the saloon of the law building among others. (The word "saloon" may need further definition as it may also mean a hall for meeting.)

The problem of a satisfactory meeting place overshadowed all other business at the convocation in 1857. A suitable site had been found at 47 North Calvert Street (**Figure 2**) and because the acquisition of the house was accepted by the group, its purchase was authorized. In 1858, the Faculty assembled for an epoch-making event—its first meeting in its own hall.

A lethargic syndrome affected the Faculty during and immediately after the Civil War. Meetings were not held and transactions were not published. Because Calvert Street had become a major north-south artery, it was not considered satisfactory for the quiet and composure needed for reading, meetings, and courses of instruction. Accordingly, the house was sold in 1867, and the property at 60 Courtland Street (**Figure 3**) was acquired in September 1869. Events inaugurating the occupation of the new home were held one month later. This change revivified the Faculty.



Figure 3. The house on the hill was too small to have a room for a library.

The building proved to be a bad meeting place, however, because its location on the steep slope from Calvert Street to Charles Street made entrance difficult, particularly in winter. The convention of 1874 was the last one held in the Courtland Street house.

(Those readers interested in a more detailed study of the local geography will not find Courtland Street on present day maps. The street ran between Franklin Street on the north and Lexington Street on the south. When the Preston Gardens were created in the period of 1914 to 1919, the east side of St. Paul Street and the west side of Courtland Street were razed, and the new area was called St. Paul Street and St. Paul Place.)

A subsequent move was made in 1874 to a hall on the second floor of a building on the north side of West Fayette Street, a few doors removed from Park Avenue. The new rooms were later found too small "to accommodate the very valuable library and to display periodical literature."

In June 1878, a "well-lighted, neatly furnished, and easily



Figure 4. Hopkins Hall, on the old campus of the Johns Hopkins University, was the site of many meetings. (Figure used with the permission of The Ferdinand Hamburger, Jr. Archives of the Johns Hopkins University.)

leased. (Annual meetings had been held here on several previous occasions.)

Convocations were held (1879–1884) at the Johns Hopkins University, which was not too far away at North Eutaw and West Monument Streets (**Figure 4**). In 1885, the hall in the Athenaeum Building (northwest corner of St. Paul and East Saratoga Streets) (**Figure 5**) was again used as it had been in the early career of the Faculty because the increasing demands for space led to a denial by Hopkins. The lower floor of the Athenaeum Building was subsequently leased as another home, and meetings were held there through 1895.

At a special session in March of that year, the Faculty decided that its best interests would be served if a permanent site in a section of the city more accessible to the majority of the members could be found. The purchase of a three-story dwelling on North Eutaw Street was recommended. Although the initial choice was for 839, the house at 847 (**Figure 6**) was bought, at it was thought to be a better site. Soon after the purchase, necessary and extensive remodeling was undertaken. The old buildings at the rear of the property were torn down, and a large assembly hall extending from the main building back toward Linden Avenue was erected. Occupancy occurred in January 1896.

The space could not have been entirely desirable because in April 1908, the trustees announced that a building lot had been found on Cathedral Street near Preston Street. Hopes for a more permanent home were consummated in May 1909 when the new building at 1211 Cathedral Street (**Figure 7**) opened for occupancy. The Faculty has called this site home now for 84 years.

The passage of almost two centuries between the organizational meeting in Annapolis and the present time have seen a firm rooting of the Faculty, with a resolution of many diffi-

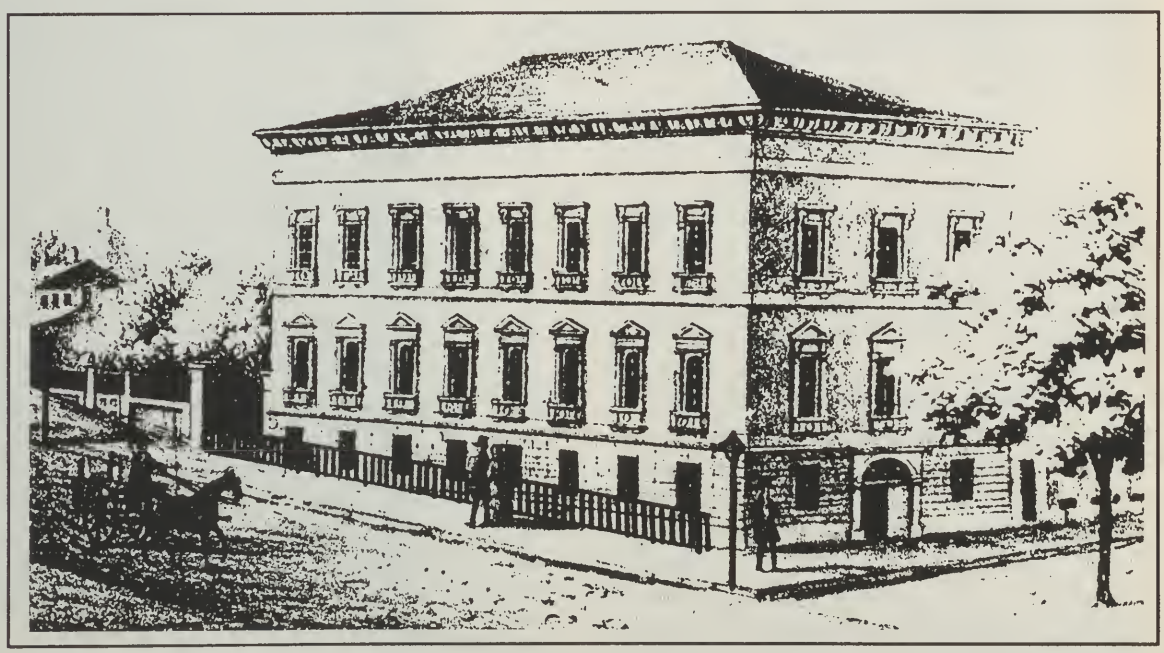


Figure 5. The rebuilt Athenaeum was opened in 1848 and was used often by the Faculty. (From *The Stranger's Guide to Baltimore*. Baltimore: Murphy and Company, 1852. Figure is courtesy of the Enoch Pratt Free Library of Baltimore.)

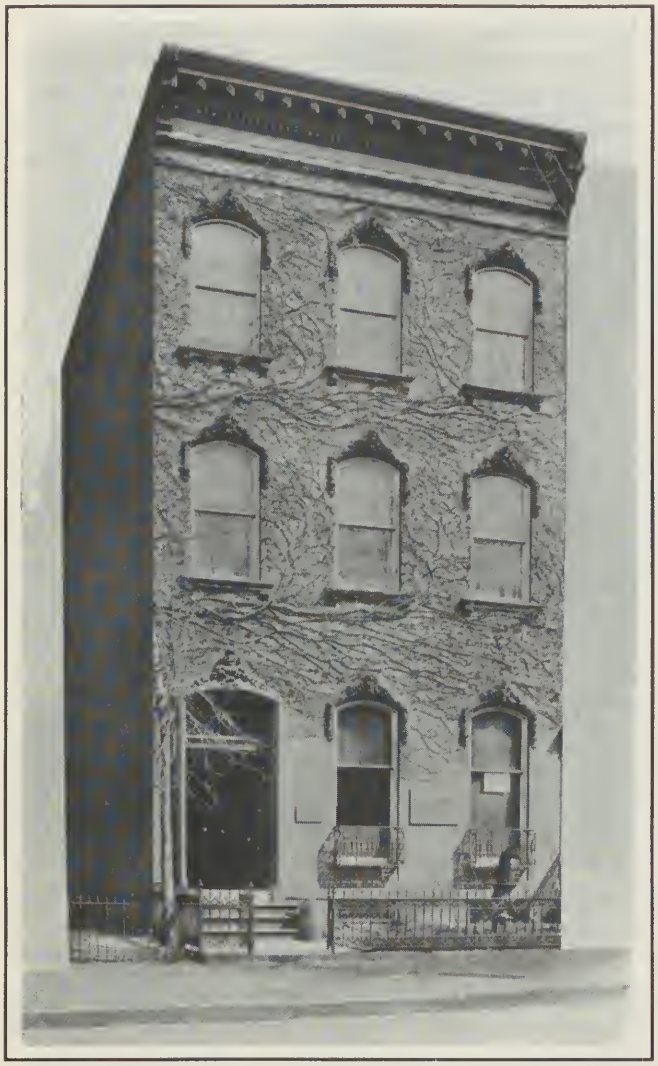


Figure 6. The Faculty acquired this house in a less busy part of the city. This portion of North Eutaw Street was also known as Hamilton Terrace.

a firm rooting of the Faculty, with a resolution of many difficulties with which it was besieged in its first century of existence. The initial gathering looked toward improvement in the quality of medicine without thought to a home. This desire has been accomplished, while the Faculty has also seen the creation of a better and more permanent domicile.

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Figure 7. The present and only home for all living members.

CLINICOPATHOLOGIC CONFERENCES at Johns Hopkins

BELUR S. BHAGAVAN, M.D., Editor
RICHARD R. GRAHAM, M.D., Associate Editor
ROBERT A. VAN WESEP, M.D., Associate Editor

A 37-year-old man with diabetes mellitus, renal transplant, fever, pulmonary infiltrates, and mental status alterations.

Participants: Alan J. Watson, M.D.; Andrew Yang, M.D.; Jean L. Olson, M.D.; and Sheldon I. Bastacky, M.D.

PRESENTATION OF CASE

A 37-year-old white male with a 21-year history of insulin-dependent diabetes mellitus complicated by retinopathy, peripheral neuropathy, and end-stage renal failure received a cadaveric renal transplant.

The post-transplant course was complicated by the development of a peritransplant hematoma in the right iliac fossa and acute rejection. The hematoma was treated conservatively, and the acute rejection was treated by an increase in steroid dosage. Three days following discharge, the patient experienced sudden onset of severe right iliac fossa pain associated with shortness of breath and palpitations.

General findings. Upon admission to the emergency room, physical examination showed that the patient was in mild distress. The pulse was 110/min, blood pressure was 220/110 mm Hg, the temperature was 37.4°C, and respirations were 20/min. Skin examination was normal. Head, eyes, ears, nose, and throat (HEENT) examination showed diabetic retinopathy and poor dentition. The lungs were clear to auscultation and percussion. Auscultation of the precordium showed a grade III/VI systolic ejection murmur, loudest at the left sternal edge and radiating to apex. Abdominal examination revealed a healing right iliac fossa incision and right iliac fossa tenderness. There was a right forearm arteriovenous (AV) shunt. Neurologic examination was normal.

The past history was remarkable for diabetes mellitus and early cataracts. Family history was positive for diabetes mellitus and coronary artery disease. The patient lived in Baltimore with his wife and two children. He was a nonsmoker and nondrinker. The patient had a cat at home.

Medications on admission included insulin, Catapres (clonidine hydrochloride), Tenormin (atenolol), minoxidil, Imuran (azathioprine), prednisone, and cyclosporine.

Lab values. On admission, laboratory values were as follows: sodium, 143 mEq/L; potassium, 5.8 mEq/L; chloride, 111 mEq/L; bicarbonate, 23 mEq/L; blood urea nitrogen, 50 mg/dl; creatinine, 2.4 mg/dl; glucose, 359 mg/dl; hematocrit, 26.1%; mean corpuscular volume, 93.9; red blood cell distribution width (RBC-DW), 17.3 (normal 11.5–14.5); white blood cells, 10,300/mm^3; platelets, 539,000/mm^3; prothrombin time, 12.8 sec (1.1 x control); and partial thromboplastin time, 17.6 sec (0.7 x control).

A chest x-ray showed cardiomegaly without infiltrates. An electrocardiogram showed sinus tachycardia (104/min), normal QRS axis, T-wave inversions in leads I, AVL, and V5-V6.

Hospital course. Exploratory laparotomy revealed a recent and organizing hemorrhage around the transplant kidney, arising from a pseudoaneurysm at the site of the renal artery anastomosis. The hemorrhage was evacuated, and the vascular anastomosis was repaired using pledgets. Cultures of the hematoma were positive for *Staphylococcus epidermidis* and *Enterobacter aerogenes*, which were treated with intravenous gentamicin and vancomycin therapy. A subsequent abdominal computed tomography (CT) scan demonstrated reaccumulation of a large fluid collection, which was aspirated under ultrasound guidance. Cultures of the fluid were positive for a resistant streptococcal species, prompting addition of imipenem.

The patient underwent repeat laparotomy following the onset of fever with rigors, at which time two infected pledgets were removed and a new hematoma was evacuated. Culture of the hematoma was positive for *Staphylococcus epidermidis* and group D enterococcus.

Evolving mental status changes in the setting of an antibiotic refractory fever prompted a cranial CT scan and lumbar tap, both of which were unremark-

From the Johns Hopkins School of Medicine, Departments of Medicine, Pathology, and Radiology where Dr. Watson is associate professor of the Renal Division; Dr. Yang is instructor in radiology; Dr. Olson is associate professor of pathology; Dr. Bastacky is postdoctoral fellow in pathology; Dr. Bhagavan is associate professor of pathology; Dr. Graham is lecturer in pathology; and Dr. Van Wesep is lecturer in pathology.

able. A cerebrospinal fluid (CSF) cryptococcal antigen assay was negative. Cytomegalovirus (CMV) serology titers were positive, but no baseline values were available.

Four weeks after admission, the urine, throat, and surgical wound cultures were growing *Candida albicans,* and amphotericin B was started. Two days later, the patient developed acute respiratory failure with bilateral pulmonary infiltrates, disseminated intravascular coagulopathy, hemodynamic instability, and obtundation. Sputum legionella direct fluorescent antibody test was negative. The patient expired following cardiopulmonary arrest, and a complete autopsy was performed.

DISCUSSION

Dr. Alan J. Watson: The case Dr. Olson has chosen for us this morning is a complicated one. In sum, the patient was a 37-year-old man whose past history was most remarkable for a long period of insulin-dependent diabetes mellitus complicated by retinopathy, peripheral neuropathy, and a nephropathy. He developed end-stage renal disease, which required regular hemodialysis for 14 months prior to receiving a cadaveric kidney transplant. The process was complicated by the development of a slowly expanding hematoma in and around the transplant and questionable rejection. Both were treated, and the patient was discharged. Three days after discharge, he developed a sudden onset of severe right iliac fossa pain associated with tachypnea and tachycardia. His past history was also significant for other complications of diabetes, cataracts, and a vitrectomy. Family history was positive for diabetes mellitus. From the social perspective, he lived in Baltimore with his family; he had a cat. His medications included a variety of agents to treat his hypertension and diabetes, and immunosuppressant agents to prevent rejection of the allograft.

When he was admitted, the notable clinical features were a temperature of 37.4°C, tachypnea, tachycardia, and hypertension. In addition, there was tenderness to palpation in the right flank and pelvic area.

Laboratory values were remarkable for a serum creatinine of 2.4 mg/dl, a white blood cell count that was at the upper level of normal at 10,300/mm^3, and normal coagulation parameters. A chest x-ray showed mild cardiomegaly without infiltrates. Electrocardiogram showed nonspecific changes.

At this point, I would like to consider the differential diagnosis as our surgical colleagues would have pondered over it in the emergency room. The patient presented with pain and tenderness over the allograft. The first and foremost consideration in this setting is the potential for acute graft rejection. Available effective treatments to reverse rejection and to preserve kidney function make early identification of this complication important. Acute allograft rejection may present with fever and evidence of fluid retention, which this patient did not have. Another consideration in the differential diagnosis is urinary leak. Since ureteric anastomosis at the time of transplantation often results in a disruption of the blood supply to the lower ureter, necrosis can ultimately occur, and a urinary leak may develop. Superimposed infection will result in a painful swelling in and around the transplant.

When I first read Dr. Olson's summary, I thought this patient had developed an allograft rupture. This uncommon but serious complication of renal transplantation tends to occur if ongoing rejection causes the kidney to become swollen. The typical clinical features include sudden onset of exquisite pain, tenderness over the graft, swelling, and shock as a result of a rapidly expanding hematoma. The importance of considering this diagnosis is that immediate laparotomy with drainage of the hematoma and



Figure 1. Coronal T1 weighted image showing transplant kidney in right iliac fossa and small perinephric fluid collection.



Figure 2. Transverse T2 weighted image showing transplant kidney in right iliac fossa and perinephric fluid collection (arrow).

suturing of the kidney in many circumstances saves the graft.

Next in the differential diagnosis is the possibility of infection. One of the key predisposing factors to pyelonephritis is an abnormal anatomy of the urinary tract as is the case with a transplanted kidney.

At this stage we will consider radiologic evaluation of the patient.

Dr. Andrew Yang: Approximately one week post-transplant, a coronal T1 weighted MRI (magnetic resonance image) of the transplant kidney in the right iliac fossa demonstrated good corticomedullary differentiation. One can see patency of the ipsilateral iliac arteries and veins. There was a small perinephric fluid collection **(Figure 1).**

A week later, this perinephric fluid collection had increased in size. The corticomedullary differentiation of the transplant kidney remained. There was also no evidence of swelling of the transplant kidney as seen by the presence of renal sinus fat.[1]

In order to differentiate between the various causes of fluid collection in the post-transplant period, we did other pulse sequences. The fluid collection, instead of brightening, darkened on the T2 images, suggesting the presence of hemosiderin **(Figure 2).** This is compatible with a hematoma rather than an abscess, although we could not tell whether the hematoma was infected. A CT scan done one week later showed a continually expanding perinephric fluid collection.

Three weeks later, a drain had been placed, and the perinephric fluid collection had disappeared.

A Doppler ultrasound study of the segmental artery flow in the transplant kidney initially revealed a fairly high diastolic/systolic ratio **(Figure 3A).**

A week later, the diastolic/systolic peak velocity ratio had decreased **(Figure 3B).** This finding is not specific for rejection, but could be seen in other causes of poor renal function.[2,3] In summary, the radiographic changes were compatible with hematoma in the perinephric area, but there was no evidence of marked rejection.

Dr. Watson: Given these radiologic findings and the clinical considerations, our surgical colleagues opted to undertake an exploratory laparotomy, which identified a hematoma around the transplant kidney. The source of this was believed to be a pseudoaneurysm at the site of arterial anastomosis, which was repaired. Cultures of the hematoma grew *Staphylococcus epidermidis* and

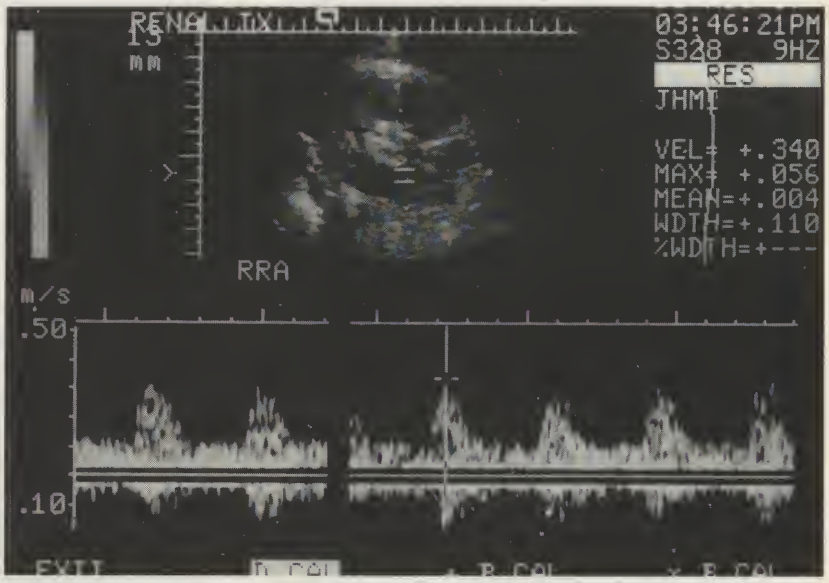


Figure 3A. Doppler ultrasound study of segmental artery flow in the transplant kidney showing high diastolic/systolic velocity ratio.

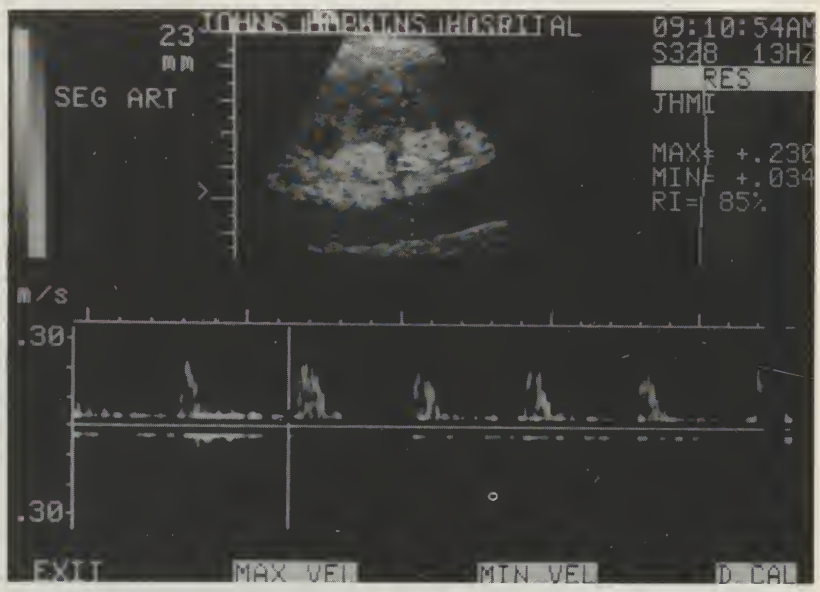


Figure 3B. Doppler ultrasound study of segmental artery flow in the transplant kidney, one week after the study shown in **Figure 3A.** The diastolic/systolic ratio has decreased.

Enterobacter aerogenes; broad spectrum antibiotic therapy was initiated. Subsequently, the fluid collection reaccumulated, was aspirated, and was again found to contain streptococcal species. Further antibiotics were added.

The patient underwent a repeat laparotomy following the onset of fever with rigors. Two infected pledgets, thought to be the cause of the problem, were removed. A new hematoma was evacuated, which also grew out various organisms. Thereafter, the patient entered into the second phase of his hospital course, characterized by refractory fevers persisting in the face of very broad spectrum antibiotic coverage and accompanied by an alteration in mental status. On reviewing the chart, clearly these mental status changes were significant, and, in fact, for the last five to six days of this patient's life, he was semi-comatose. CSF examination was unremarkable; in particular, a cryptococcal antigen assay of the CSF was negative. CMV serology titers were positive, but unfortunately, we do not have any baseline data available.

Candida albicans was recovered from the urine, the throat, and the surgical wound. On this basis, amphotericin B was initiated. Three days later, the patient became acutely ill, developing respiratory failure with bilateral pulmonary infiltrates, a coagulopathy, hemodynamic instability, and worsening of his altered mental status. He expired the next day, following a cardiac arrest.

Dr. Yang: A baseline chest x-ray showed some very mild cardiomegaly, but otherwise normal lungs. As late as five days before death, there was no evidence of infiltrates within the lungs, and the heart size was normal.

However, four days later, one began to see some cardiomegaly or pericardial effusion with development of nonspecific bilateral interstitial infiltrates in both lungs **(Figure 4).** There was no evidence of hilar adenopathy. A differential in an immunocompromised patient includes opportunistic infections due to viral pneumonia such as CMV, which would have more basilar infiltrates; toxoplasmosis, which may present with a pattern like this; and *Pneumocystis carinii,* which has a fine interstitial pattern.[4,5]

One day later, the infiltrates had increased in both lungs, predominantly in the mid lungs bilaterally. The heart was slightly enlarged, but otherwise unchanged.

After insertion of the Swan-Ganz catheter, the heart size decreased slightly. There was accentuation of alveolar pattern and slight increase of interstitial infiltrates. The differential diagnosis at this point included acute respiratory distress syndrome (adult respiratory distress syndrome) superimposed on an interstitial infection.

Dr. Watson: Encapsulating this second phase of the hospitalization, which was the terminal illness, the patient had a fairly rapid onset of fever and a pneumonic process in the face of broad-spectrum antibiotic therapy. The patient also experienced an alteration in mental status, progressing to the state of complete obtundation. Dr. Yang described a subtle and progressive increase in heart size. The chart contains an assessment of the creatinine phosphokinase enzymes and the MB fraction. So I have included inflammation of the heart (i.e., myocarditis) as perhaps another facet of what I believe is an infectious process in this immunocompromised patient. I use the term myocarditis loosely because patients with diabetes mellitus and patients with end-stage renal disease have a high incidence of atherosclerotic disease, which can affect the coronary arteries and predispose to myocardial ischemia.

On reflecting on the history of transplantation and the associated mortality, one can see that in the early 1960s, there was a very high mortality rate.[6] As time went on, and immunosuppressive agents, particularly azathioprine and prednisone, were regularly used, the success rate rapidly improved. More important, the mortality rate progressively fell, and as transplant physicians and surgeons gained more experience, and newer antibiotics were developed, this mortality rate fell further.[7] It is important to note that the very high mortality rate associated with septicemia and pneumonia has also fallen to a low level. However, although deaths as a result of infection have progressively fallen, we should not presume that infection is not a problem in immunocompromised transplanted patients; we must constantly remain vigilant of the potential for infection.

Where are the common sites of infection in a renal transplant patient? As I mentioned before, the urinary tract is anatomically abnormal and the

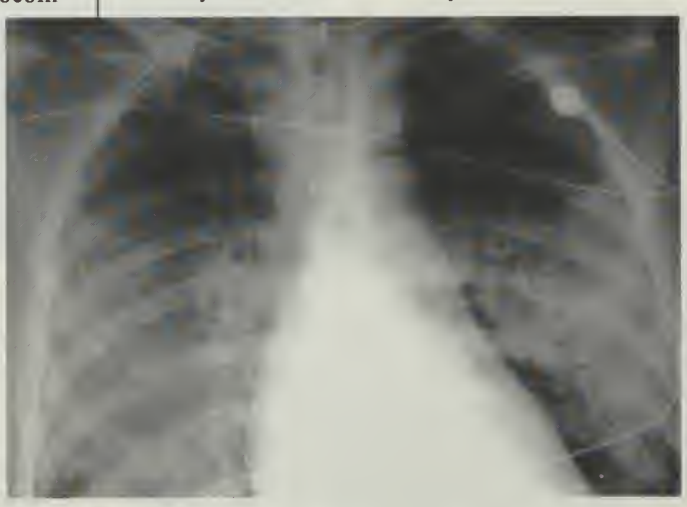


Figure 4. Chest radiograph showing enlargement of cardiac silhouette and nonspecific bilateral interstitial infiltrates.

incidence of urinary tract infection is high.[8] This makes avoiding the use of catheters imperative in such patients, particularly in the postoperative period. Pneumonia accounts for some 20% of infection, septicemia is common, and wound and cannula site infection account for over three-quarters of the infections we see in a transplant patient. More important, they account for some 25% of the overall mortality.[9] The majority of infections are due to various bacteria, although viral infections and fungal infections account for almost half of the opportunistic infections.[10] Protozoa, particularly *Pneumocystis carinii,* make up some 5%.[10] Mixed infections occur in 30% of cases. For example, *Pneumocystis* may accompany a cytomegalovirus infection, or a cytomegalovirus infection may complicate a bacterial pneumonia.

When faced with a renal transplant patient with a fever, there are four major considerations. The first is the recognition that there is a defective immune system. In particular, there is a defect of the cell-mediated arm of the immune system, which predisposes to a wide range of organisms—opportunistic infections. The second important consideration is the time of infection relative to the time of transplantation, an important point to which I shall return.

The third consideration is epidemiologic factors, such as the geographic locale. For example, in the midwestern United States, there is concern over histoplasmosis, and in the southwest, coccidioidomycosis. We must also consider exposure potentials with herpes virus. In fact, we routinely tell our transplant patients to avoid, at all costs, any friend or relative who develops herpes simplex or herpes zoster infections. The fourth consideration is the site of infection as identified by our clinical examination and subsequent test. For example, cryptococcosis tends to localize in the central nervous system (CNS); whereas, *Pneumocystis carinii* tends to affect the lungs.

In considering the temporal relationship, dependent upon the time after transplantation, one can see clustering of infection with a particular organism.[10] I will use this framework as an approach to this particular patient.

The first organism to consider is CMV—one of the most common infections in the renal transplant recipient. It tends to occur most frequently a month or two after transplantation, just around the time that our patient became ill.[10] Many of us have been exposed to CMV, which might appear as a subacute, cold-like illness or a fever for a day or two. A diagnosis is confirmed only by looking for the presence of antibodies to CMV in the blood stream. But many transplant candidates on dialysis have not been exposed to this virus. In such patients, very serious infection with CMV can occur, characterized by fluctuating high fever and depression of bone marrow function manifested by leukopenia and thrombocytopenia. There may be a pneumonitis, a hepatitis with marked transaminitis, an alteration of mental status due to encephalopathy, and gastrointestinal hemorrhage due to mucosal ulceration. This organism has a predilection for the cecum and the colon and can produce exsanguinating hemorrhage through ulceration.

In many cases, CMV comes from blood transfusions, but it can be transmitted with the allograft since the allograft contains leukocytes that contain the organism.[11] Chest x-rays show diffuse infiltration, and blood gas analysis and pulmonary function tests identify a major disturbance of pulmonary function. However, x-ray findings and even the clinical signs on examination can often be very misleading. Often, the diagnosis rests with Dr. Olson and her colleagues in the examination of biopsies of various tissues to identify the characteristic intracellular inclusion bodies.

I considered CMV first of all, and certainly many of the features our patient demonstrated fit the diagnosis of CMV, but we did not have any knowledge about prior exposure. We did know an antibody titer was positive but could identify no evidence of bone marrow suppression or hepatitis. For those reasons, I put aside the diagnosis of CMV and considered other infectious possibilities.

Pneumocystis carinii, a once almost forgotten organism, has experienced recent renewed interest because 70% of pulmonary infections in patients with acquired immunodeficiency syndrome (AIDS) are caused by *Pneumocystis carinii.*[12] Presenting features include shortness of breath and a nonproductive cough, but physical examination is often very unremarkable as is the chest x-ray in which very subtle interstitial changes are the rule. However, pulmonary function studies usually demonstrate a major disruption of pulmonary physiology. The diagnosis is facilitated by early bronchoscopy, bronchoalveolar lavage, and transbronchial biopsy if necessary. Use of special stains identify the organism, which responds promptly to high dose intravenous trimethoprimsulfamethoxazole. On occasion, the organism produces a very devastating lung lesion with cavity formation and pneumothorax. However, *Pneumocystis carinii* infection tends to localize to the lung and would not account for a systemic infectious process. Infection by various fungi must also be considered. Aspergillosis, occasionally seen in the transplant population, occurs more often in patients who are granulocytopenic, especially in those who have been granulocytopenic for considerable periods of time and who have received many antibiotics. Pulmonary involvement is characterized by a virulent necrotizing pneumonia. In fact, individuals who have this pulmonary infection are prone to expectorate

large quantities of infarcted lung. This very dramatic clinical feature emphasizes the nature of this infection and reflects that the pathophysiologic process at work is one of pulmonary infarction. In the case of multi-organ infection, the clinical manifestations are those of multi-organ infarction. It tends to be a very insidious disease, difficult to diagnose early. In general, by the time it is diagnosed, it has reached the multi-organ dissemination phase. I do not believe this patient had Aspergillus since the onset was rapid, and the pneumonic process did not appear to be typical of that fungal infection.

What about candidiasis? I mention this because of the finding of *Candida* in several sites. In our case, we have to postulate disseminated candidiasis with involvement of the eye, the kidney, the liver, and the heart. Because pneumonitis is a very uncommon feature of *Candida* infection, I do not believe the individual had systemic candidiasis although I think that the selection of amphotericin as a treatment at that time was probably a correct one. Since we can culture the organism rapidly, we can easily diagnose candidiasis, but on occasion we have to resort to tissue diagnosis.

We have had an interest in the last few years in various fungal infections in transplant patients. We have had 11 cases of cryptococcal disease in our institution since transplantation began, which is the largest single series of *Cryptococcus neoformans* infection in transplant patients.[13] It tends to be a subacute or chronic disease, and, in the majority of patients, it occurs well after transplantation. The major site of infection is the CNS presenting as a subacute or chronic meningitis. Lumbar puncture with assessment of cryptococcal antigen is a very sensitive test. It was negative in our patient. It is unusual to have isolated cryptococcal disease of the lung, and when it occurs, it tends to appear in isolated infiltrates and not as a diffuse process as in this patient.

We have also had experience with a number of patients with mucormycosis in this setting. A literature search and review of this entity indicates that the vast majority of affected patients have diabetes mellitus.[14] Most of the patients present with a rhinocerebral form of mucormycosis, characterized by an erosive, destructive sinusitis, which usually requires urgent debridement. Pulmonary lesions are nodular and ultimately progress to form a dramatic cavitary lesion. We also must consider agents such as nocardiosis and toxoplasmosis. Nocardiosis, characterized by a pneumonic process in 75% of cases, has a peculiar propensity to develop pleural effusions, which our patient did not have. There also may be intracerebral mass lesions.

To this point, we have dealt with three of the four major considerations necessary in the assessment of the febrile transplant patient. We recognized that the individual is immunosuppressed and prone to infection by a variety of opportunistic infections, and we have considered many of those. We have taken into consideration the time after transplantation; we have considered the site of the infection. This individual had a CNS process, a pneumonic process, and, perhaps, a process affecting the heart. We have yet to consider the fourth consideration—various epidemiologic factors.

On review, a very important point appears in the social history. The patient lived at home not only with his family but with a cat. The significance of this observation is the fact that the cat is a definitive host for the protozoa *Toxoplasma gondii*. When a cat is infected, several phases of protozoal maturation occur within the gut. The cat excretes infectious feces containing oocysts, which can result in the infection of a variety of animal species and humans. In the vast majority of cases, exposure to *Toxoplasma* in an immunocompetent individual is not of major concern; however, it is of great concern to two categories of people. The first is pregnant women, particularly in the early stages of pregnancy, who when exposed to toxoplasmosis can pass the infection on to the fetus, and the child may be born with congenital toxoplasmosis. The second group of people is the immunocompromised such as our patient—the renal transplant patient on immunosuppressive drugs. In such a patient, disseminated toxoplasmosis can occur. The clinical features of this disease are fever, lymphadenopathy, various skin rashes, a pneumonitis, which is very similar to pneumonitis caused by the cytomegalovirus, and myocarditis.[15] It may also cause a frank meningitis or an encephalitis in addition to mass lesions of the cerebrum. While this individual had a negative lumbar puncture, a review last year of cases of toxoplasmosis affecting the CNS in patients with AIDS identified that in many of these patients, the lumbar puncture was, in fact, negative. So, this negative test does not preclude a diagnosis of toxoplasmosis; nor does the negative unenhanced CT scan negate this diagnosis. An enhanced CT scan can accurately identify mass lesions. The patient had unenhanced CT scan, and no dye was given because of the concern that the radiocontrast dye might prove nephrotoxic to the graft.

I believe that in this individual who was immunosuppressed, exposure to a cat resulted in exposure to *Toxoplasma gondii*, which produced a disseminated disease resulting in a pneumonia with a superimposed adult respiratory distress syndrome. Toward the end of his life, there was a CNS process, probably an encephalitis and/or a meningitis and perhaps the early development of a myocarditis.

The Sabin-Feldman dye test confirms the diagnosis, although a brain biopsy may also be needed. The treatment is pyrimethamine and sulfonamide.

I would like to emphasize three points in summary: first, consideration of the time of onset of infection relative to the time of transplantation; second, the approach to the febrile transplant patient and particularly the importance of a detailed history; and third, consideration of epidemiologic factors. If physical examination, tests, and cultures do not clarify the etiology of the pneumonic process quickly, bronchoscopy and bronchoalveolar lavage, biopsy, and special stains to identify various opportunistic infections should be used aggressively. Assessment of CSF in patients with an alteration in mental status or focal neurologic signs is of great importance, and one should look for fungi with, for example, the India ink stain for cryptococcus and should use the cryptococcal antigen test. Perhaps we ought to obtain baseline titers (cytomegalovirus titers and antibodies to toxoplasma) prior to transplantation, to make a comparison titer more meaningful should a patient develop an acute febrile illness.

In the absence of a prompt diagnosis, the mortality rate in all of these types of infections increases dramatically. Thus, it is important to recognize the need for rapid diagnosis of a particular infection in a given patient to allow for early institution of appropriate therapy.

Dr. Watson's diagnosis:
Toxoplasmosis of lung, brain, and heart.

Dr. Jean L. Olson: Examination of the native kidneys revealed end-stage diabetic nephropathy with large Kimmelstiel-Wilson nodules, diffuse increase in mesangial matrix, and marked thickening of the capillary loops. There were extensive hyalinosis lesions, which is an accumulation of plasma protein within the capillary loop, and also some hyaline arteriosclerosis.

As Dr. Watson mentioned, the patient had been on dialysis for 14 months prior to receiving the transplant. This is reflected in an almost uniform intimal proliferation of arteries that occurs when patients are on dialysis.[16]

Now, what happened to the hematoma? Examination of the transplant kidney itself failed to reveal any evidence of infection. Granulation tissue with foreign body giant cells was present in the soft tissue surrounding the transplant, but no evidence of any active infection was noted, excluding the hematoma, as a source of the fever at the time he died. The transplant did show some very mild acute rejection as manifested by mild proliferation with intimal inflammatory cells in an arcuate artery. The patient also had evidence of acute tubular necrosis (ATN) based on both the presence of mononuclear cells within the vasa recta, and also uniform dilation of proximal tubules. The ATN was probably due to overwhelming sepsis at the time of his death.

The patient had been receiving large doses of corticosteroids and other immunosuppressive agents, and that was reflected in the adrenal gland by marked atrophy of the cortex of the adrenal gland and loss of the lipid and by tubular change, particularly noted in the zona glomerulosa. These alterations show that he was effectively immunosuppressed.

His tongue showed a superficial infection by *Candida* organisms with both yeast and pseudohyphal forms (**Figure 5**). The presence of pseudohyphae indicates active infection. Since this was the only location where we found *Candida,* it was strictly of the mucocutaneous type with early invasion and was not the cause of his death.

Scattered small remote granulomas were present in the lung, liver, and spleen. Their size suggested that in the past, the patient may have had histoplasmosis. There was no evidence of any kind of acute change or reactivation of these granulomas.

Examination of psoas muscle, which is easily accessible at autopsy, showed a cyst with organisms. The differential diagnosis is histoplasmosis versus toxoplasmosis. Since this patient also had small granulomas, histoplasma was a serious consideration. There were many more cysts within the heart. We did not find any evidence of myocarditis in our sections. Special stains aid in the differentiation between toxoplasmosis and histoplasmosis. Histoplasma should stain with periodic acid Schiff reaction. These were negative, but when we used Giemsa stain (**Figure 6**), the *Toxoplasma* organisms

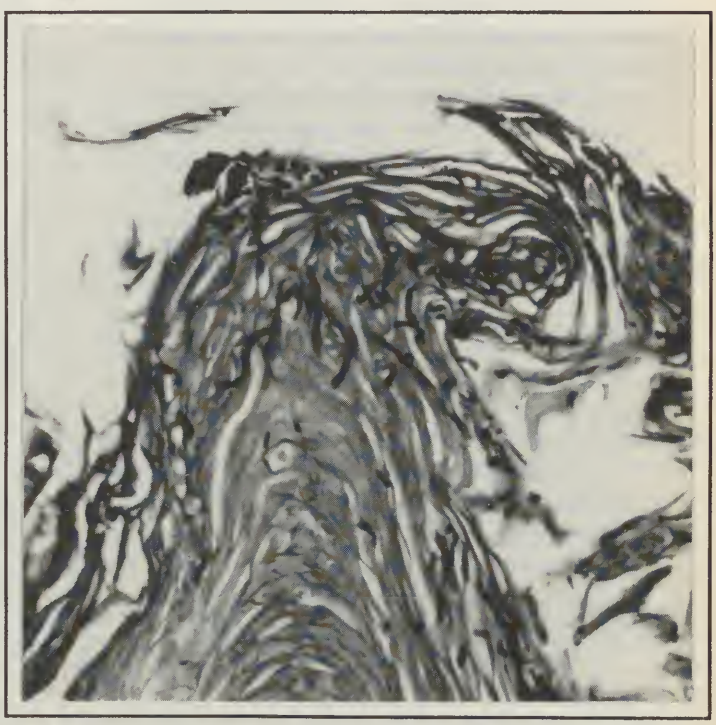


Figure 5. Light micrograph showing yeast and pseudohyphal forms of *Candida* organisms invading superficial epithelium of tongue. (Methenamine silver, X 400).

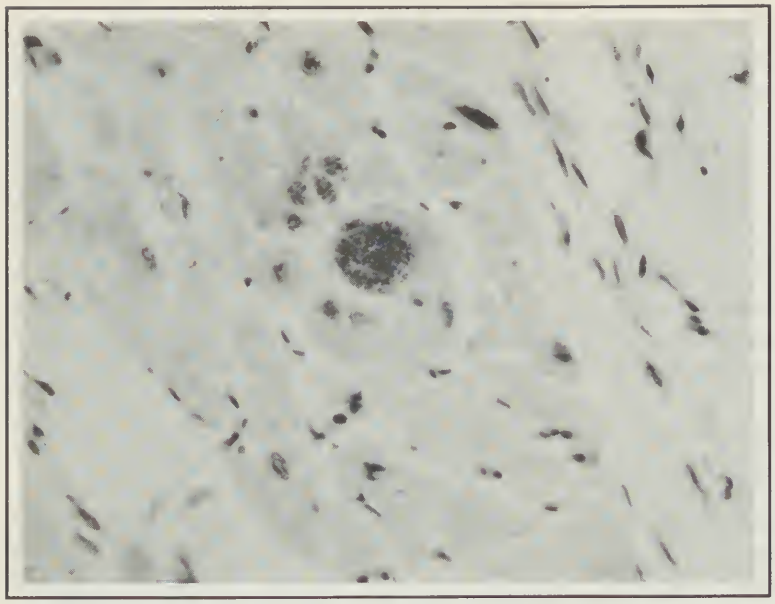


Figure 6. Light micrograph of heart showing several neighboring myocytes containing cysts with *Toxoplasma* bradyzoites. (Giemsa, X 340).

were easily seen. When they are encapsulated in the cysts, they are called bradyzoites because they grow slowly. When the individual organisms are confined to the cysts, as in the heart and skeletal muscle of this patient, that indicates infection some time in the past.

The two places where there was evidence clinically and also at autopsy of infection were the lungs and the brain. In some areas of the lung, there was not much evidence of infection. Rather there was a proliferation of the type 2 cells and the occurrence of hyaline membranes, supporting a diagnosis of adult respiratory distress syndrome, which contributed to the terminal event.

Other areas of the lung showed an alveolar infiltrate with necrosis and scattered neutrophils **(Figure 7).** Cysts containing the bradyzoites were identified. But in addition, some cysts ruptured so that organisms escaped and became tachyzoites, which means they can multiply quickly. Immunocompetent hosts who have been previously infected with *Toxoplasma* can destroy such organisms, which may escape from the cysts. However, in an immunosuppressed patient, the tachyzoites can cause progressive lesions as probably happened in this patient. His lungs had a diffuse infection with *Toxoplasma.* The organisms were very easy to find and were usually in areas where there was an inflammatory infiltrate. The infiltrate was muted because the patient was immunosuppressed, but it was present. He was responding, but inadequately, to the proliferation of these organisms in the lung.

Examination of brain showed a spectacular meningitis with white, thickened meninges over both frontal lobes. Microscopically, one could see thickening of the meninges and a few inflammatory cells. There were no organisms present in the meninges.

On cut section of brain, meningeal thickening was quite pronounced. In addition, there were scattered small lesions. Since they measured only 3 to 4 mm, it would be difficult to pick them up on most routine CT scans.

Microscopic examination of the brain revealed glial nodules in virtually every section of brain. Several microscopic foci were much too small to be picked up by any radiologic procedure. Glial nodules have a long differential diagnosis. In cases in which such nodules are infectious, one has to be able to identify the organism itself. In this case, particularly, in those nodules that showed necrotic centers, cysts containing *Toxoplasma* organisms were noted **(Figure 8).** On occasion, one could find cysts with small tachyzoites breaking out, indicating progressive *Toxoplasma encephalitis.*

Our anatomical diagnosis on this patient was disseminated toxoplasmosis involving the lungs, brain, skeletal muscle, and heart. Stored serum was available for serologic tests. His *Toxoplasma* titer three years before his fatal illness was 1:16. One year later, his titer had risen to 1:185. A fourfold increase indicated that there had been an active infection. Additional findings included superficial candidal infection, mild acute rejection of the transplant kidney, and diabetic nephropathy in the native kidney.

Toxoplasma gondii was first described in 1908 and first seen in a human in 1923. The first docu-

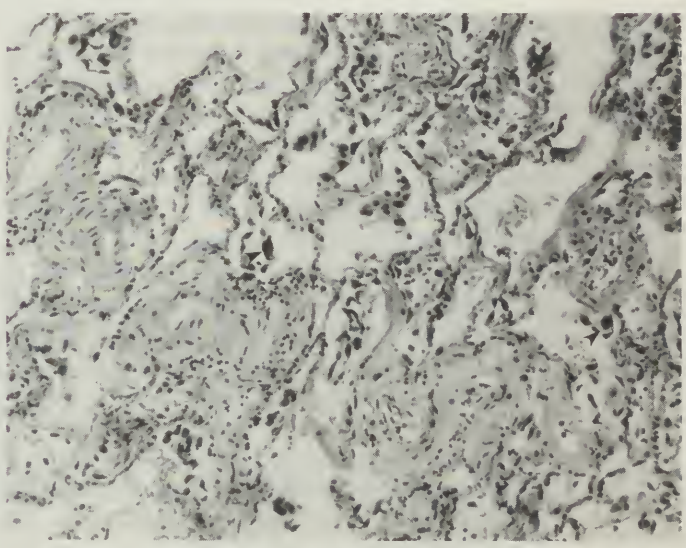


Figure 7. Light micrograph of lung showing patchy interstitial fibrosis and cuboidal alveolar lining cells. Rare lining cells contain *Toxoplasma* organisms (arrowheads). (Hematoxylin–eosin, X 200).

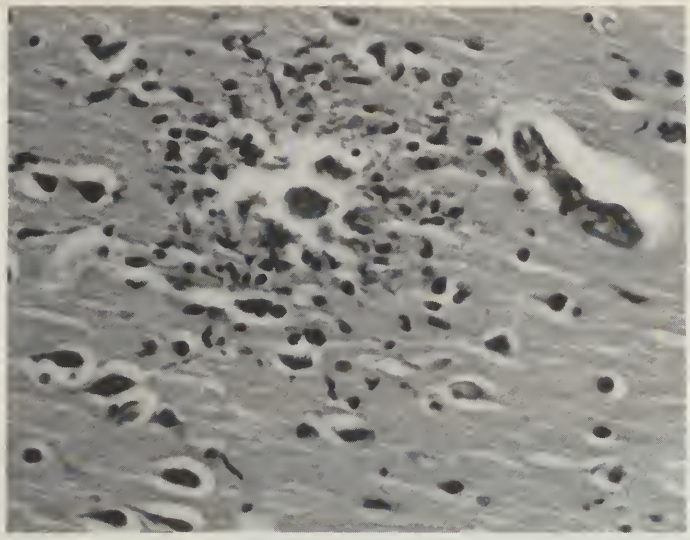


Figure 8. Light micrograph of brain showing glial nodule with macrophage containing *Toxoplasma* organisms. (Hematoxylin–eosin, X 310).

mented congenital transmission of the organism was in 1937. The first serologic test was in 1948, and the first recognition of an association with cats was in 1970.[17] Toxoplasmosis in the immunocompromised host frequently indicates reactivation of disease by cysts that rupture and an inability of the host to curb the infection.[15,18] Disseminated disease usually results. The course is often fulminant with death in only a few days to a week or two as was illustrated in this patient.

We should address the question of how this patient got the disease. Several different possibilities exist. The first possibility is reactivation of latent disease. We know the titer rose from 16 to 185. Thus, an inability to handle organisms from ruptured cysts because of the immunosuppression may have resulted in dissemination. The disease possibly resulted from an acute infection picked up from the family cat exacerbated by defects in cellular immunity. A final possibility for the origin of the organisms is an infected allograft.

Anatomical diagnosis:

Disseminated toxoplasmosis involving lungs, brain, skeletal muscle, and heart. Tenfold rise in *Toxoplasma* titer between 1986 and 1987 (time of transplant).

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This clinicopathologic conference was presented at the Johns Hopkins University School of Medicine on October 26, 1988.

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Imaging Case of the Month

A 42-year-old male patient complained of right shoulder aching discomfort that was exacerbated by the use of the arm at or above the shoulder level, sometimes interfering with sleep.

Physical examination showed a tenderness over the greater tuberosity and the anterior edge of the acromion. A painful arc (45° to 120°) was present. No history of trauma was noted. The patient was referred to magnetic resonance imaging (MRI) for evaluation of the rotator cuff, following a conventional radiograph of the right shoulder.

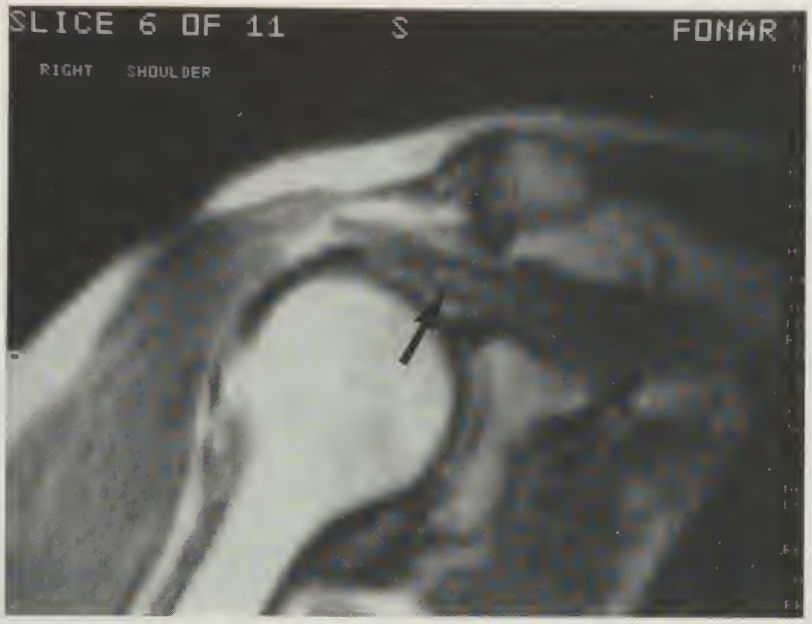


Figure 1.

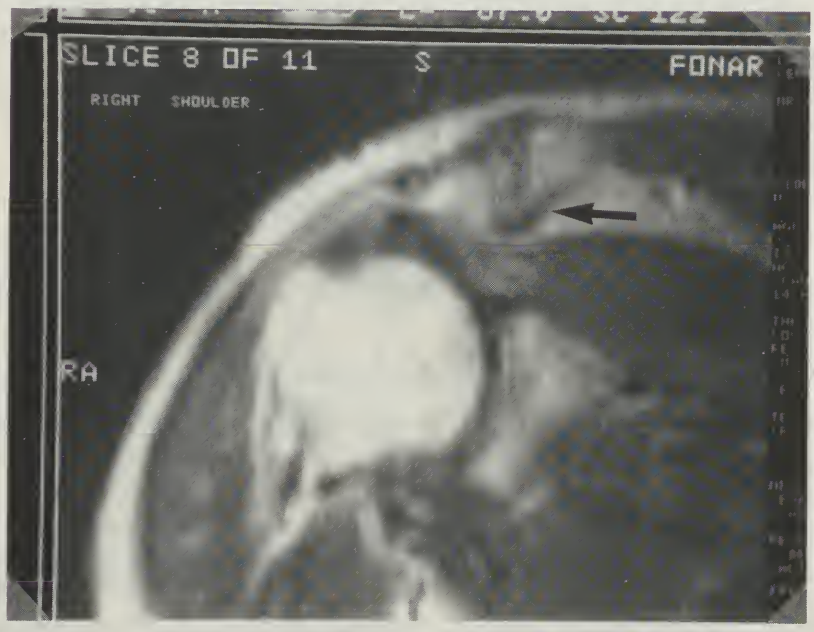


Figure 2.

Impingement syndrome

Figure 1. A 42-year-old male patient with impingement syndrome. Short TE (echo time) oblique coronal image shows increased signal intensity area in thickened supraspinatus tendon (arrow) and indistinct margins, indicative of tendinitis.

Figure 2. Long TE oblique coronal image reveals no fluid in the subacromial bursa. Acromioclavicular joint osteoarthritis with spurring (arrow) is well demonstrated, impinging the superior surface of the supraspinatus tendon.

The impingement syndrome is an important cause of shoulder dysfunction.[1] Impingement is commonly secondary to

a. Low-lying anterior acromion process that narrows the space between the anterior acromion and the humeral head.

b. Callus or osteophytes on the inferior surface of the acromion or acromioclavicular joint.

c. Thickening of the coraco-acromial ligament, which traps the rotator cuff between bony eminences.

Most rotator cuff tears develop in response to chronic microtrauma in the form of mechanical impingement. The common pathway for the various forms of shoulder impingement is mechanical irritation of the rotator cuff by hard, bony projections (callus or spurs underneath the low-lying acromion or acromioclavicular joint).[2]

Impingement syndrome is divided into three stages:[1] Stage I of Neer's classification occurs in symptomatic individuals less than 25 years of age and is associated with hemorrhage in the critical zone of the supraspinatus tendon. Stage II occurs between ages 25 and 40 and is associated with rotator cuff tendinitis, secondary to chronic trauma. Stage III occurs after 40 and is associated with frank cuff tears.

Tears most often occur in the critical zone, a poorly vascularized section of the rotator cuff located between the anterior acromion and the humeral head. According to Neer, 95% of cuff tears are associated with chronic impingement syndrome.[3]

MRI offers an accurate and sensitive measure for evaluating acromioclavicular joint impingement. It clearly shows indentation of the superior surface of the supraspinatus tendon by callus or spurs. The subacromial and subdeltoid fat pads are usually obliterated when significantly impinged upon.[2]

More reliable indications of clinical pathology are secondary changes within the supraspinatus tendon, depicted as thickening and increased signal intensity within the tendon (tendinitis) on short TE (echo time) weighted images. According to Crues, three MRI findings have been reliable indicators of a complete rotator cuff tear:

1. Proximal retraction of the musculotendinous junction of the supraspinatus tendon.
2. Liquid in the subacromial bursa.
3. Liquid collection interrupting the rotator cuff.[4]

MRI has quickly become an important modality in the delineation of the rotator cuff tears. Compared with arthrography, it is noninvasive and shows not only intra-articular and bone disease, but bursal, soft tissue and bone marrow abnormalities as well. Compared with sonography, MRI is not operator-dependent, and the criteria for the examinations of the rotator cuff tear seem to be clearer.[5]

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EDGAR C. FEARNOW, M.D.
Department Editor ■

PHYSICIAN AUTHORS WANTED

"Imaging Case of the Month" is a regular feature of the *Maryland Medical Journal*. Coordinated by the Maryland Radiological Society, the cases presented provide a review of a broad range of diseases and pathological processes of interest to a wide range of specialists.

Physicians interested in submitting cases for publication consideration should contact the deprtment editor:

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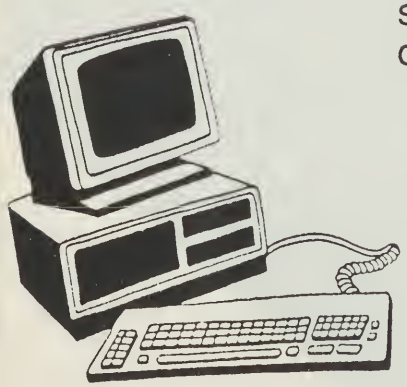
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Target audience: Physicians and office managers
Date: Saturday, March 13, 1993
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Rafael Haciski, M.D., F.A.C.O.G., chairperson
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WORD ROUNDS

Bart Gershen, M.D.

Chiromancy

It was the afternoon of a recent Council meeting. A motion had just passed encouraging the application of adhesive labels to waiting room magazines. The labels were to express Med Chi's rejection of all cigarette advertisements contained within. A member then rose to suggest that we should explain to our patients who the Medical and Chirurgical Faculty is by adding parenthetically to the sticker ("Medical Society of the State of Maryland").

The physician seated next to me leaned over and whispered, "What the hell DOES *chirurgical* really mean?"

Abruptly—as did Belshazzar at Babylon—I saw the handwriting on the wall. And so I began....

Cheirourgos is the Greek word for 'surgery'. It stems from *cheir* 'the hand' + *ergon* 'work'—therefore, handwork or work performed by one's hands. (Things that surgeons do best.) Thus, the Medical and Chirurgical—or Surgical—Faculty.

Cheir may be found in several words, such as **chiropractor**—one who practices (a type of treatment) by using his or her hands. The chiropractor performs a **manipulation** (*manus:* Latin for 'hand'). You may also remember an obsolete specialty—**chiropodists:** those who treated diseases of the hands and feet (Greek *pous, pod*). Today, the specialty limits itself solely to the feet, and its practitioners are called **podiatrists.** The mammalian order *chiroptera,* which includes our friendly bats, owes its taxonomy to the same source—*cheir* 'hand' + *pteron* 'wing'—an animal with a winged hand. (A **helicopter,** by the way, is a *helix* 'spiral' + *pteron* 'wing'—a whirling or spiralling wing, referring to the propellers).

Ergon, the Greek word for 'work', is found in **energy**—Greek *en* 'at' plus *ergon* 'work'—to be "at work." And you may remember that the unit of work accomplished by one dyne acting through a distance of one centimeter is called an **erg.**

As noted above, the Latin word for 'hand' is *manus.* When we **manufacture** something, we make it (Latin *facere*) by hand, and the instruction **manual** describes how your hands must execute the task. That is precisely the reason we refer to them as **handbooks.** Incidentally, old **manuscripts** were actually written (Latin *scribere*) by hand—a subtle form of **manual** labor.

The French word *manouvrer* means 'to cultivate' the land (by working with the hands). Over years of lexical evolution, it has resulted in our word **manure**—literally the stuff our hands work with to fertilize the soil. (And occasionally used to describe this column.)

The **manubrium,** that distended upper sternal shield, looked like part of a saber to some creative prosector. Therefore, it was named *manus* 'hand' + *habere* 'to hold'—since it resembled the handle of a sword. The caudal portion of the sternum, of course, is called the **xiphoid,** which in Greek means

'like a straight sword'. In Latin it is called the *ensiform* process (*ensis* 'sword' + *forma* 'shape'—sword-shaped). The body of the sternum is seldom remembered. It is known as the **gladiolus** from Latin *gladius* 'sword'. All **gladiators** will grasp these penetrating observations.

The **gladiola,** a tropical member of the iris family, has funnel-shaped flowers arrayed on one side of the stem and a few sword-shaped leaves from which it obviously derives its name.

Pediatricians owe their title to the Greek words *paidos* 'of a child' + *iatros* 'physician'—children's physician. (**Iatrogenic** refers to disorders—*genic* 'caused by'—physicians.)

Orthopedics refers to Greek *ortho* 'straight' plus *paidos* 'child'—to "straighten a child," obviously a reference to bony and cartilaginous deformities in youngsters. It is **not** related, as some have thought, to the Latin word *pes* 'foot'—the genitive of which is *pedis* 'of the feet'. (As in **pedestrian** "one who walks," or **pedal**, "operated by feet.")

A **pederast** (from Greek *paidos*) indulges his grotesque carnal obsessions with (male) children. A **pedagogue** (from *paidos* + *agein* 'to lead')—that is, to lead or teach a child—is an educator. It is ironic, however, that some teachers become too **ped**antic. An **encyclopedia** derives from Greek *enkyklios* + *paideia* 'instruction of children in the circle of arts and sciences'.

Words derived from the Greek *pous* or the Latin *pes,* both of which refer to feet, are myriad and occasionally camouflaged. From the Greek we find such items as **tripod** (*tri* 'three-footed'), **octopus** (*octo* 'eight-footed'), **platypus** (*platy* 'flat-footed'), **polyp** (*poly* + *pous* 'many-footed'), and **podagra** (*pous* + *agra* 'a seizure'—that is, a foot seizure, or gout.)

From Latin we derive **impediment**, something that ensnares or entangles the feet; **expedite**, something that frees one who is caught by the feet; and **pedunculated**, the narrow stalk of a tumor that appears to be attached "by a foot" to its host. The **piedmont** region lies at the foot of the mountains (Latin *mons* 'mountain'), and **pedigree**, a genealogical chart whose lines connecting generations of relatives resemble the *pied de grue* (French) 'the foot of a crane.'

In ancient Rome, a midwife was known as an *obstetrix.* Virtually unchanged, the term currently delineates our obstetrical colleagues. It derives from the Latin *ob* 'in front of' + *stare* 'to stand'—that is, someone who stands or occasionally sits, in front of the parturient female. Which, of course, is where one expects to find such specialists.

During the 17th century, as Galileo invented his telescope in Italy and William Harvey described the circulation of blood in England, French physicians began to usurp the function of midwives. These were among the first physicians to attend and deliver pregnant women and were called **accoucheurs**. (French: to minister to someone 'on the couch'—a reference to the labor bed.) The term is obsolescent but may occasionally be heard with reference to the **accoucheur's hand**—carpopedal spasm, usually induced by hypocalcemic tetany,which results in a distorted hand shaped like that of a delivering obstetrician's.

This may be observed in acute pancreatitis, hypoparathyroidism, and metabolic or respiratory alkalosis. It forms the basis for Trousseau's Sign—elevation of a blood pressure cuff above systolic pressure for five minutes—resulting in carpopedal spasm in patients with hypocalcemia. Armand Trousseau described the sign in 1862, calling it *Main D'accoucheur.*

The term **midwife** is from the German *mit* 'with' + *weib* 'wife', which became **midwif** in Old English, and refers to the individual who remains "with the wife" during delivery. Midwives themselves may be female or male.

Incidentally, a maneuver performed by obstetricians in the past was known as **podalic version.** It consisted of turning the fetus into position for delivery by manipulating both feet into the cervical canal. (**Podalic** from the Greek *pous* 'foot'.)

"and that," I finished triumphantly, "is what chirurgical means."

He was fast asleep.

The meeting was over. ■

A Look Back

The activities of the Medical and Chirurgical Faculty

Reprinted from the *Maryland State Medical Journal* 1952; 1(1):3–6.

Walter D. Wise, M.D.

Dr. Wise was Med Chi president in 1951.

For a long time, it has been evident to officers of the Medical and Chirurgical Faculty that many members have inadequate knowledge of the activities of this society and its indirect value to them. Some members feel that because they do not use the library, for reasons of distance, lack of time, or some other cause, they get no benefits beyond the pleasure and advantages of the medical meetings, which in most state societies are limited in number (this function being for the most part the responsibility of the city and county components). Because it seems necessary that the manifold activities of our state society and its components become better known, it was decided to find a more fitting medium for the transmission of their transactions. To this end, as is pointed out elsewhere in this issue by Dr. Edwards, chairperson of the Council, it was decided to publish a journal. It is almost certain that at no time in our history has it been more important to have a well-organized and supported state medical organization.

The number of doctors in our society has increased from 1,232 in 1925 to 2,401 in December 1951*, and the activities of our organization have multiplied to a very great degree.

In 1925 there were the same three committees as we have today, which are elected by the House of Delegates: The Committee on Scientific Work and Arrangements, the Library Committee, and the Finney Fund Committee. The Professional Conduct Committee, which was inaugurated in April 1950, is the only other committee included in the Constitution and Bylaws.

The work that may be called routine, such as that of the library, which has about doubled in the past 25 years, the regular medical meetings, the Council meetings and those of the standing committees, has gone on as before except for a considerable increase in the volume of work and the results. At present, there are 32 appointed committees, of which six were in existence in 1925, at which time there were only eight committees all told.

In addition to the duties of the regular standing committees, some of the newer matters that have called for varying numbers of meetings and hours of work and which have resulted, in some cases, in the appointment of additional standing committees, are:

a. Our part in developing the Blue Cross, on whose board (Maryland Hospital Service) we have 24 corporate members.

b. Our part in the development of the Blue Shield, on whose board (Maryland Medical Service) we have eight Class "A" members.

c. The development of the Medical Care Plan. (As a result of a recommendation of the House of Delegates of the Medical and Chirurgical Faculty.)

d. A detailed survey of the hospitals of Maryland under direction of the Medical Committee of the State Planning Commission.

e. Aid in the implementation of the Hill-Burton Act, of which funds there has been spent in Maryland in the past four years $4,177,000 of federal money. By June 1952, the amount will be $5,197,836.06. There has been participation in 25

*Editor's note: As of January 1993, there are 7,020 members.

projects, with a total expenditure at the end of the current year of over $17,000,000. This has been done through a statewide committee of laypersons and representatives of the state Department of Health and the Medical and Chirurgical Faculty.

f. The Faculty has representatives on the Red Cross Regional Blood Center Program Committee and Medical Committee.

The representatives of the Faculty on the above mentioned boards, committees, etc. conduct their activities independent of the Faculty office. The chairperson of the 32 existing committees carry on the functions of their committees usually through the office of the Faculty.

The committees which functioned in 1925 and are still in existence are as shown in **[Table 1].** Since 1925, [many] committees, besides others which have been discharged, have been appointed and in most instances the name indicates the work of the committee **[Table 2.]**

The amount of time and thought put into the efforts of these committees and the amount of material reported out would surprise anyone not familiar with the proceedings. Perhaps the unknowing visualize the committees as having a meeting or two and finishing their work. This is true in a few instances. Those who were responsible for developing the Blue Shield, the Medical Care Plan for the Indigent, those who work on the "dog fight" or made the hospital survey for the obtaining of the Hill-Burton Act funds, would have a different account to relate.

The amount of material that comes to 1211 Cathedral Street from the Chicago and Washington offices of the American Medical Association, and almost countless independent groups of doctors and lay organizations, largely concerning matters detrimental to the profession or public welfare, would likewise be surprising. This has to be read and acted upon. As stated, the Maryland Legislature now meets yearly instead of every two years as formerly and this means that the Legislative Committee and director of the Faculty have to give almost twice as much time as formerly to the guarding of the public interest.

Probably few of our members know that under the law, the governor of Maryland requests the officials of the Medical and Chirurgical Faculty to submit lists of names, from which he makes appointments on the following boards:

1. ***Medical Board for Occupational Disease for the State Industrial Accident Commission.***
2. ***Council on Medical Care of State Department of Health.***
3. ***Advisory Council on Hospital Construction to the State Board of Health.***
4. ***Advisory Board to the State Department of Health for Licensing of Hospitals.***
5. ***State School Health Council.***
6. ***State Board of Physical Therapy Examiners.***

The first annual meeting of the Women's Auxiliary of the Medical and Chirurgical Faculty was held in April 1950, and this organization is taking an active part in community affairs, educational projects, etc., and the Faculty office is doing the secretarial and clerical work of the auxiliary.

One outstanding function of our state society that should be cherished

Table 1. Committees in existence from 1925–1952

1. ***Maternal and Child Welfare Committee,*** which has been very active and helpful in reducing the mortality rate in newborn babies and young children.
2. ***Memoir Committee.***
3. ***Eugene Fauntleroy Cordell Fund Committee.*** (Formerly Fund for Widows and Orphans, and given present name to honor Dr. Cordell.)
4. ***Committee on Public Instruction.*** Radio and television programs are given under the auspices of the Medical and Chirurgical Faculty and Baltimore City Health Department, and other public educational programs through state and city health departments.
5. ***Committee on Defense of Medical Research.*** A most recent activity was the fine work in the antivivisection fight in Baltimore City, and resulted in the formation of the Maryland Society for Medical Research—a strong organization deserving of warm support.
6. ***Legislative Committee.*** There has always been a Legislative Committee and the work carried on by these members, particularly during the time when the General Assembly meets in Annapolis, which is now every year, is a very heavy load. Members of this committee, particularly the chairperson, are compelled to spend much time in Annapolis to attend meetings of the legislature so as to bring to the attention of the members of the House and Senate the effect on the public of bills pertaining to medicine and related matters. The committee makes every effort to protect the health and welfare of the citizens of Maryland.

Table 2. Committees existing in 1952

1. ***Committee on Constitution and Bylaws.*** The Faculty now has a standing Committee on Constitution and Bylaws and in these changing times, this committee spends a great deal of effort in keeping the Constitution current.
2. ***Physiotherapy Committee.***
3. ***Army Medical Library Committee.***
4. ***Cancer Committee.***
5. ***Tuberculosis Committee.***
6. ***Mental Hygiene Committee.***
7. ***Committee on Rural Medicine.*** This committee has held in recent years two rural health conferences in the Faculty building, which were attended by physicians and lay people from throughout the state.
8. ***Committee on Industrial Health.***
9. ***Blood Bank Advisory Committee.***
10. ***Medical Care Campaign Committee.*** The Council at its meeting on February 10, 1949 adopted the recommendation of a Special Committee, which has representatives from every county in the state, as well as a Speakers Bureau. This committee disseminates educational information to the public, provides speakers, and carries on an active campaign against federalized medicine.
11. ***Sesquicentennial Committee*** (new building).

    Subcommittees:

    Finance

    Building plans
12. ***Committee to Advise the State Industrial Accident Commission.***
13. ***Committee on Medical Service and Public Relations.***
14. ***Postgraduate Educational Committee.***
15. ***Diabetic Detection Committee.***
16. ***Committee to Study Certain Phases of Medical Economics.***
17. ***Committee to Consider the Relationship Between Hospitals and Specialties and the Manner of Payment for Professional Services.***
18. ***Presidential Advisory Committee.***
19. ***Civilian Defense Committee*** with its several subcommittees. Some of the recently appointed committees are functioning as follows:

- (20.) ***A Scientific Speakers Bureau*** has made available to component medical societies a list of physicians, who will address their societies on current medical subjects.
- (21.) ***Advisory Committee to the Women's Auxiliary,*** which consists of five Faculty members who are available at all times to assist and advise the officers of the auxiliary in their projects.
- (22.) ***The Advisory Committee to the State Health Department,*** which meets with members of the state health department to iron out any difficulties which may arise between the profession and state department of health. This is an active committee and an able detailed report was given by Dr. A. A. Pearre at the Ocean City semiannual meeting, September 14, 1951.
- (23.) ***Professional Conduct Committee.*** Never a week goes by that this committee does not receive mail from either lay people or doctors embodying complaints. This committee gives a great deal of study to the problem and settles the differences in many cases.
- (24.) ***The Committee for the Study of Pelvic Cancer*** was approved by the House of Delegates and Council in April 1951 and has set up an office in the Faculty building under the auspices of the American Cancer Society.
- (25.) In recent months, a ***Joint Committee of the Faculty and Bar Association*** has been formed, and it is hoped through their efforts to have a closer liaison between the medical and legal professions. To this end, they are holding symposiums on timely subjects to which the medical and legal professions, as well as the public, are invited. One important meeting on the narcotic problem has been held. In December, there will be a meeting on court procedures.

and forever protected is the election of the State Board of Medical Examiners. As far as we know, we are the only state having this privilege.

These are some of the many activities to which the members of the Medical and Chirurgical Faculty give their time, advice, and knowledge to help the citizens of the state of Maryland. Many of you are on some of these committees, some have wide knowledge of the activities of the so-

ciety as a whole—many do not. To acquaint the entire membership with our statewide activities is one of the chief reasons for the desire to publish a larger journal.

For the most part, the subjects just mentioned are at the state level. About one-half of the state society membership is in Baltimore City. The Baltimore City Medical Society uses the Faculty headquarters and office staff. Their society is broken up into numerous sections, with their many meetings which have to be arranged. They have their own committees as follows:

1. ***Committee on Geriatrics.***
2. ***Committee on Emergency Medical Calls.***
3. ***Health and Physical Education.***
4. ***Hospital Survey Committee.***
5. ***Legislative Committee.***
6. ***Maternal Mortality Committee.***
7. ***Maryland Committee Against Un-American Activities.***
8. ***Program Committee.***
9. ***Committee on Public Medical Education.***
10. ***Magistrate's Committee.***
11. ***Membership Committee.***

The city society also has its own women's auxiliary. The activities of the Baltimore City Medical Society plus those of the county societies, of course, are to be added to the total accomplishments of the state society.

The *Bulletin of the Medical and Chirurgical Faculty,* a leaflet, was inaugurated in December 1927 to give the members a concise account of the activities of the state association. Subsequently, in April 1949, the secretary, Dr. Yeager, felt that it would be advisable to supplement the *Bulletin* with a newsletter, which would be informal and carry information to the members relative to the activities of the Medical and Chirurgical Faculty, American Medical Association, etc. The journal will bring the information contained in the *Bulletin* and newsletter, plus scientific articles and editorials. We hope it will be extremely valuable.

One sometimes hears the inquiry—what do I get out of the state society for my dues? We hope the reading of this journal will give a clear answer. One answer that has been true over the years is—you have working for your interest and in the interest of the public, several hundred committee members who give a surprising amount of time and energy. Their services could not be purchased with money.

It is hoped that in forthcoming issues of the journal, the members will become familiar with the activities and accomplishments of the Medical and Chirurgical Faculty. ■

Library Volunteer Opportunities

The library is seeking interested volunteers to help process Med Chi's historical collections. Projects include cataloging medical instruments, arranging and describing medical manuscripts, and rehousing prints and photographs. Our goal is to make this material accessible for members and researchers in the history of medicine. If you would like to be part of this exciting project, please contact **Margaret Burri, Historian/Administrator, at 410-539-0872 or 1-800-492-1056.**

From the Med Chi Collections

Literature searches in response to patient inquiries

When faced with a direct question by his patient, the court requires that the physician must research the question and base his judgment for treatment on this research.... It would be just good basic medicine to conduct a literature search.

Sam Pemberton, J.D., attorney
Tacoma, Washington

The above quotation is taken from an article entitled "Informed consent in an information society" that appeared in the March/April 1992 issue of the National Library of Medicine's publication *Gratefully Yours.* Sam Pemberton had represented an air force couple in a medical malpractice action against the United States government. The wife had been diagnosed as having epilepsy and was taking the anticonvulsant drug, Dilantin (phenytoin), prescribed by military doctors. When the couple decided to have more children, they made appointments with three different military physicians specifically to ask about the risks of taking Dilantin. Relying on the information the physicians provided (that the anticonvulsant could cause only cleft palate and hirsuitism, which were both correctable), the couple had two girls over the next two years. Both girls were subsequently diagnosed as having fetal hydantoin syndrome, and suffer from mild to moderate defects.

Damages were sought for the failure of the three physicians to respond to the plaintiffs' questions concerning the risks of anticonvulsant medication on unborn children. The court said: "With the demands of their profession, no one can expect doctors to have all material information stored in their minds.... A literature search will put a physician on notice of these risks." Judgment was subsequently entered in favor of the couple.

Again quoting Sam Pemberton: "the standard of care requires that, when faced with a *direct question* by a patient, the physician must research the question and base his or her judgment for treatment on this research."

How Med Chi can help

The Med Chi library will be happy to provide literature searches for you using our MEDLINE search capabilities, which allow us rapid access to the 7+ million citations in MEDLINE. Simply call us with your search requirements (410-539-0872 or 1-800-492-1056), or fax them to us at 410-727-5967. We normally provide search results the same day via fax; if yours is an emergency situation, we will conduct the search and provide you our results immediately.

If the information contained in the abstracts is insufficient for your needs, we can then provide you copies of the articles from the Med Chi collection or request the information from another library if we do not have the article(s) needed.

And for a limited time only...

If you are a member who has never used our literature search service, we shall provide you your first search free. (Our normal charges for members are designed to recover costs only, and are billed at only $2 for each year searched. If the results exceed six pages and you wish us to fax the citations to you, there is an additional fee of $.50 per page for the seventh and following pages.)

Conclusion

The Med Chi library can help in obtaining the information your patients need quickly and economically. We can also help you in gaining access to such information for yourself. Please feel free to contact us.

STEPHEN JONES, MA, MS
Manager, Information Services
Med Chi library ■

Beginning with this issue, the "Library Page" has been renamed "From the Med Chi Collections" to more adequately reflect the scope of the library's activities, including automated information services, history of medicine research materials, and current medical literature.



Consultation, a weekly radio program sponsored by the Medical and Chirurgical Faculty of Maryland allows Med Chi physicians to appear each week on WBAL to discuss the lastest developments in medicine and to answer questions about health issues. Med Chi currently airs the following program of Consultation weekly:

Sunday Morning Consultation
A half-hour program
Interview format: one-on-one talk with John Stupak
Pretaped Wednesday evenings from 7:30 p.m. - 8:00 p.m.
Play back is on WBAL-AM radio Sunday mornings at 9:30 a.m.

To speak out, fill in the form below.

Name_____

Address_____

City_____

Zip Code_____ Phone(____)_____

Specialty_____

Return to Lori Robinson, Med Chi, 1211 Cathedral St., Baltimore, MD 21201-5585. For more information call 410-539-0872 or toll free in MD 1-800-492-1056.

Speak Out on Consultation

Book Reviews

The Travelling Free-Lance Physician! How to set up and operate your own locum tenens practice. Gary L. Monroe. Houston: Magellan Publishing Company. 1990. 157 pages. $75.00.

Because physicians must occasionally absent themselves from their practices, the author believes that a growing need for qualified free-lance doctors exists. These temporary physicians must be able to travel on demand and provide quality care. Multiple locum tenens positions may offer a recommended variant to a steady, confined practice, and, for physicians who agree, the manual may be useful.

Entrance into the field may first be gained by accepting offers from an agency. As individuals become more experienced in this type of practice, they may advertise for positions and eliminate the intermediary, thus making a greater amount of money. The author provides all of the details for creating a free-lance, locum tenens practice.

He avers that such a physician may earn more than a substantial income, gain greater clinical experience, and have time for travel, study, and further education. Monroe lists certain caveats: the doctor must be competent, have good credentials including board certification, be flexible, be capable of adapting to new and varied working environments, be self-motivated, and have a good business sense.

He adds lists of locum tenens and physician placement agencies, the names and addresses of state licensing agencies, malpractice carriers by state, current rates of pay for replacement physicians as charged by agencies, and societies that might have mailing lists for members to use in locum tenens marketing.

Details of recordkeeping and accounting while at home and on the road are suggested. The system is simple and utile as experienced by the author. Options for eating, lodging, and transportation are presented. A sample of a contract agreement between the physician and the hiring party is presented in detail.

The reasons for the pursuit of a locum tenens practice are presented in a rosy manner, but the disadvantages are glossed over. The difficulties of being away from home for irregular, perhaps protracted, periods are not mentioned. Family life, particularly if children are involved, could become most difficult. Daily contact with spouse and children could be lost and unhappiness result. Unmarried physicians may find this wandering existence wonderful, but the married individual may think differently.

Monroe is an anesthesiologist and so may more easily shift into a locum tenens type of practice. Even at a home base, work is provided for him by his surgical colleagues. At other hospitals away from home, he probably finds professional acceptance more easily than if he were a surgeon taking over an established practice.

Set in large type, the book may be read easily. The information is frequently redundant, however, and the format could be improved by elimination of repetitive material. The price seems exorbitant considering the nature of the material presented.

JOSEPH M. MILLER, M.D.
Timonium

■ ■ ■

In My Father's House. E. Hunter Wilson, Jr., M.D. Baltimore: The Johns Hopkins University Press. 1992. 274 pages. $18.95.

Stress, guilt, sorrow, resentment, and, finally, relief characterize this first novel, a story of the pursuit of a residency at the

Johns Hopkins Hospital in the 1930s. Perhaps these feelings linger to some extent today, although some changes in the mechanics of the system may have occurred to relieve the fear of not being a real achiever. The grueling and tiresome demands of the hospital service on the resident's time frequently led to unhappiness and a difficult family life. The most elite medical staff in the country could graduate only the best residents, who were then to take leading places at other institutions.

Hunter honestly appraises the rigorous nature of this residency system and, having been a resident at Hopkins, may do so properly. Two main characters are presented in the novel. One, who has achieved the professorship of neurosurgery, tacitly approves the decision of a young intern, delegated to his care, who decides to put the medical portion of this life in hibernation for a period of time so that he may regroup, rethink, and perhaps avoid the tempestuous life experienced by the professor.

This well-written book has three parts—a prologue, story, and epilogue. The main characters are introduced in the prologue; the professor and an intern on the medical service who cares for him during his illness. Through a series of flashbacks to 1935, the story is interwoven with events occurring 50 years later in which the professor reviews his interim life of great professional reward and deep personal tragedy.

He finally reaches the goal of his days as an intern but at his retirement ceremony, he collapses. In the course of his hospitalization, the true nature of his illness—cocaine addiction—is recognized by the intern. The wife of the chairperson is an alcoholic and his daughter has become relatively estranged from him because of the "marriage" of the professor to his



E. Hunter Wilson, Jr., M.D., the author of *In My Father's House*, is a graduate of Hopkins and an internist in private practice in Baltimore.

career. In the epilogue, the reader is left to judge whether or not the course is worth running when all the obstacles and results are considered. After spending time with the professor, the intern has second thoughts about continuing his own medical career and resigns his internship to find time for self-exploration.

All becomes well at the close of the novel as the professor and his family gain a deeper understanding of life, its problems, and their interrelationships. He learns that the intern might be his grandson and that he may have some role in helping his newly found relative at a later date.

Knowledge, fame, and grief were the temporal rewards of the professor, but he had little familial happiness. Fortunately, the convalescence from his illness offered him an opportunity to reconstruct his life and seek a better living with his family. He had never clearly seen his goal in life, having been blinded by his driving desire for medical success.

The residency system, as it is portrayed, has much to condemn it. A casual review of the placement of the individuals who were graduates of the system under one of the last professors of surgery at the institution, however, reveals the high quality of the education provided. Many of these men became chairpersons or professors at other medical schools and made distinct contributions to the enhancement of the medical education of others. These results partially justify the harshness of the system that produced them.

The period of residency, a time of refinement, is the occasion of true separation from family and the start of a career. Newly graduated individuals at center stage and a crossroad of life are desperately trying to reach the top of their profession. The educational road is rigorous, but the reward at the end of the rainbow is great. Finished residents may be satisfied that they have competed successfully with their peers and withstood the multiple challenges of the system. Honest curiosity leads to hard work and enables them to realize their potential ability. Much good can be said for the system.

Conceiving the story, Hunter invents persons and situations to accomplish his task. Journalistic license has carried him too far in certain portions of his account, however, and these episodes lend little substance to the total picture. The trip to Saudi Arabia and the unfortunate craniectomy on his own son, based on a missed diagnosis by the professor, add nothing to the fundamental theme. The added self-inflicted punishment resulting from the operation was not necessary to complete the story.

The reading is light and does not require reader effort. Individuals who are acquainted with Hopkins will enjoy fitting real people with the characters portrayed in the book.

JOSEPH M. MILLER, M.D.
Timonium

■ ■ ■

Medicine's New Vision. Howard Sochurek. Easton: Mack Publishing Company. 1988. 179 pages. $39.95.

"To see what no man has seen before," a paraphrase from *Star Trek,* describes the activity that Howard Sochurek relates in this book. Radiology has made giant leaps forward in the last 20 years, with each exciting accomplishment being followed rapidly by another. The need for x-rays to visualize the anatomic area under study has been removed by new techniques as scientists have created safe, accessible, and nonpenetrating methods to explore the body. Literally, the history of this era could be titled, "Tomorrow is Yesterday."

Continuing, parallel investigations have unearthed multiple methods of anatomic visualization and, in some instances, of functional evaluation. The radiologic literature has become replete with a fascinating number of acronyms: magnetic resonance imaging (MRI), computerized axial tomography (CAT scan), ultrasound (US), positron emission tomography (PET), and single photon emission computerized tomography (SPECT). In addition to these subjects, the author discusses the various types of interventional radiology such as angiography, including computer manipulation (digital subtraction), angioplasty by balloon and laser, cavity drainage, vessel occlusion, and extracorporeal shock wave lithotripsy, used by the radiologist/urologist team to fragment renal calculi. A brief reference is also made to the treatment of cholelithiasis. The book concludes with a section on radiation therapy and one on mammography.

Despite the phenomenal growth of these new techniques, 80% of the radiologist's work is still plain film radiography. At the time of publication, over 130 million conventional diagnostic radiographic procedures were performed annually in the United States, with the exposure of about one billion films.

Curiously, Sochurek first presented his material in the January 1987 issue of *National Geographic.* The reason for the appearance of his studies in that magazine is unknown, although he may have believed that the article would more likely reach a greater lay and professional audience. At the urging of the Radiological Society of North America, he subsequently expanded the covered material by adding newer work and produced a book. He strongly emphasizes the ever-changing role of radiology in the medical arena and underscores the important part of the radiologist in medical diagnosis and, in some instances, treatment. The public need-to-know aspect of his presentation takes precedence in this encyclopedic portrayal of the various forms of radiologic endeavor.

He introduces the layperson to many of these diagnostic procedures by describing his own reactions as he experienced some of them himself. He supplements these accounts with stories of patients whose lives were markedly improved or even saved as a direct result of surgical intervention based upon these fascinating investigations.

MRI has become a powerful and versatile diagnostic tool that has led to the proliferation of equipment and stimulated research in this area. The physics of MRI has not changed much in the last few years, but the understanding and significance of these phenomena have. Technology has advanced tremendously since MRI entered its first clinical trials. The method is exciting because it does not employ ionizing radiation. When conventional x-rays are used, the only tissue-specific parameter that may be determined is electron density, which varies but little in different soft tissues so that the use of contrast material is frequently necessary for delineation of abnormal changes. A multitude of tissue conditions may affect MR (magnetic resonance). In addition, signal acquisition boundaries may be manipulated in a number of ways to control image contrast.

The author credits Dr. Paul Lauterbur with the first MRI technique in 1972 when he was able to generate a two-dimensional image of proton density. Lauterbur gave his methodology the unusual name of "zeugmatography," derived from the Greek word *zeugma* meaning 'joining' and published his findings in the March 16, 1973 issue of *Nature.*

Strangely, the efforts of Dr. Raymond Damadian, one of the pioneers in the MRI field, are not mentioned by Sochurek and, indeed, Lauterbur does not reference Damadian in his paper. The work of Damadian was published in Science on March 16, 1971. The two men were acquainted, and each knew of the work of the other. As has occurred before in medical research, they reached similar conclusions in an independent fashion.

Like all good things, a caveat is associated with the use of MRI. Being new, its best uses have not yet been delineated, and many doctors will employ the device when it is not needed. Because it is free of risk, it will often come into use as a purely defensive measure. The cost of the simplest form of MRI is about $900, and so it should be ordered only when the doctor is unable to make a diagnosis otherwise. The machine should not routinely become a substitute for the cranial computer with which the physician is naturally endowed.

Although more anecdotal than analytical, the book is well written

and has an excellent format. Most of the large number of illustrations are in color. The book will serve as a good introduction to this field for the laity and for many doctors. If reading the book accomplishes little else, it will encourage the reader who becomes a patient to discuss the investigative modalities that may be available to him/her for diagnosis. Certainly the cost factor should enter the discussion and, if a less expensive procedure will give the necessary information, it should be selected.

JOSEPH M. MILLER, M.D.
Timonium ■



Join us in a new kind of partnership ... uniting doctors, lawyers, teachers, parents, and youth against drug and alcohol abuse.

Become part of the Maryland Doctor/ Lawyer/Teacher Partnership Against Drugs.

As a doctor, you can use your first-hand knowledge and experience to make a difference in winning the war against drugs. Become part of a unique initiative in Maryland to bring doctor/ lawyer education teams into schools to talk about the medical and legal consequences of drug and alcohol abuse.

To volunteer or for more details, call Med Chi's Public Relations Department at 410-539-0872 1-800-492-1056.

Doctor/Lawyer/Teacher Partnership Against Drugs

EASTERN SHORE, MARYLAND:

New hospital opening late Spring of 1993 on Maryland's Eastern Shore, serving a dynamic community on the Atlantic Ocean. We have opportunity for BC/BP, residency trained physicians in Emergency Medicine. Excellent salary and benefit package. Qualified candidates send C.V. to James A. D'Orta, M.D., 199 Lionhead Court, Baltimore, MD 21237. Fax or Tel: (410) 686-2124.

Council Minutes

Medical and Chirurgical Faculty of Maryland
Council (400th meeting)
Friday, September 18, 1992
Princess Royale Hotel, Ocean City, Maryland

Chairperson of Council, Joseph S. Fastow, M.D., called the meeting to order at 1:45 p.m.

Approval of minutes

The Council approved the minutes of the July 16, 1992 meeting. The unapproved minutes from the Executive Committee's meeting of September 3, 1992 were distributed for information purposes only.

Welcome comments by Joseph T. Painter, M.D.

Dr. Fastow introduced Joseph T. Painter, M.D., president-elect of the American Medical Association (AMA).

Dr. Painter stated that it was a pleasure to be a part of Med Chi's semiannual meeting and brought greetings and best wishes from the AMA for a successful meeting. Dr. Painter reported that the AMA was moving forward and representing physicians more aggressively nationwide. Dr. Painter further stated that Maryland is a key player in the Federation and is respected for its activities. The AMA also expressed its appreciation to the Faculty for its support of the "Health Access America" program and the Faculty's peer review model. Dr. Painter noted that the Faculty's peer review program should be viewed in other states so that it can be replicated to bring into focus the need to have a strong, sound disciplinary system.

In closing, Dr. Painter stated that the AMA was extending a special note of thanks to the Faculty for being one of four states joining the AMA in the project, "Medical Management in Home Care." This project is a demonstration program designed to educate physicians about the benefits of caring for the elderly in their homes. To date, Maryland is one of four states (Maryland, Arizona, Texas, Illinois) involved in this program. This CME (continuing medical education) program has been presented at Med Chi's 1992 annual meeting and semiannual meeting and will be presented at the President's Regional Conference on October 22, 1992 in Hagerstown and at the 1993 annual meeting.

Dr. Painter further stated that he was looking forward to participating in Med Chi's meeting and will return to the AMA with many good ideas.

Emeritus membership

The Council approved emeritus membership for the following physicians as requested by their component society:

Anne Arundel County

John L. Pitts, M.D.

Baltimore County

Morton J. Ellin, M.D.
Mehdi L. Yeganeh, M.D.

Howard County

Elwood J. La Brosse, M.D.

Montgomery County

Horace W. Bernton, M.D.
James L. Laubach, M.D.

Waiver of dues

The Council approved the waiver of dues for the following physician as requested by the component society:

Baltimore County

Franklin D. Israel, M.D.

Legislative committee

Dr. Fastow called upon Jose Martinez, M.D., chairperson of the Legislative Committee.

Dr. Martinez reported on the committee's meeting of September 2, 1992. In accordance with Council's direction on July 16, 1992, the Legislative Committee met and developed a recommendation on the position of self-referral. The committee's recommendation, which was to be reported to the House of Delegates, was that the Faculty should oppose any legislative activity that prohibited or restricted such activity as long as self-referral was in compliance with the state disclosure laws.

Dr. Fastow stated that no further action was required at this time and that the House of Delegates would debate this issue.

Managed care and third-party liaison

In the absence of Donald Dembo, M.D., chairperson of the Committee on Managed Care and Third-Party Liaison, Dr. Fastow stated that the committee recommended that the Faculty support the Maryland Alliance for Health Care's request for $2,500 to cover Med Chi's share of the expenses associated with continued participation with the alliance, as well as to provide for future needs. This recommendation was approved.

BPQA actions reported in the *MMJ*

Dr. Fastow reported that in accordance with Council action of July 16, 1992, correspondence had been sent to Israel H. Weiner, M.D., chairperson of the Board of Physician Quality Assurance (BPQA), requesting the BPQA's position on reporting cases in the *MMJ*.

Michael Compton, executive director of the BPQA, responded to Med Chi, stating that the BPQA will forward the entire published order to the Faculty and the Faculty can summarize the order as it believes appropriate for publication in the *MMJ*.

On September 11, 1971, Council adopted the position that publication in full of the findings of fact...be pub-

lished in the *Maryland State Medical Journal.* In order to change this position, Council moved and adopted that the Editorial Board of the *MMJ* be given the authority to edit the BPQA orders for publication in the *MMJ.*

CLIA 88

Dr. Fastow reported on the status of the CLIA 88 (Clinical Laboratory Improvement Amendments of 1988) issue. The Faculty forwarded correspondence to Nelson J. Sabatini, secretary of the Department of Health and Mental Hygiene (DHMH), asking that he support the recommendations of the Laboratory Advisory Committee (LAC) to apply for "exempt" status under CLIA 88.

Mr. Sabatini indicated that the Laboratories Administration Office was considering a bill that would amend the state's laboratory law to bring it in line with the federal law. The bill would remove those sections of Maryland law that put it in conflict with CLIA 88 and provide DHMH with authority to promulgate standards "substantially equivalent" to those under CLIA 88. If successful, the state could apply for exempt status from the Health Care Financing Administration (HCFA).

Dr. Fastow further stated that DHMH was expected to make a decision regarding legislative proposals within the next few months.

Maryland AMA Delegation

Dr. Fastow called upon George S. Malouf, M.D., chairperson of the Maryland AMA Delegation.

Dr. Malouf stated that due to the resignation of W. David Sullivan (student alternate delegate), whose term would expire on December 31, 1992, the Student Component Society has nominated Mr. Robert Ferris to complete the unexpired term of Sullivan.

Council moved and approved the appointment of Mr. Robert Ferris.

HCFA'S evaluation and management analysis

Dr. Fastow stated that Barry Gold, M.D., medical director, Medicare, Maryland Blue Cross and Blue Shield (BCBSM), was unable to attend the meeting. The material provided to councilors included minutes from the July 22, 1992 meeting at Maryland Medicare, BCBSM. During this meeting, Dr. Gold provided a booklet entitled *CPT Evaluation and Management Code Data Analysis.* Dr. Gold also provided a letter responding to physicians' concerns regarding a letter they received from Maryland Medicare about the Comparative Performance Report for the new evaluation and management codes. Dr. Gold explained that this letter was intended for informational use only.

Committee on Scientific Activity

Dr. Fastow called upon J. Richard Lilly, M.D., chairperson of the Committee on Scientific Activity.

Dr. Lilly reported on the committee's meeting of September 9, 1992. He stated that the theme of the 1993 annual meeting will be "Prevention '93—Maryland." It will be held at the University of Maryland, College Park, on April 30 and May 1, 1993. This theme is consistent with recent needs assessment surveys of members, as well as plans for prevention efforts in the unlikely event of an exposure incident from mustard gas disposal within Maryland.

Dr. Lilly also stated that during the 1993 annual meeting, the Council and House of Delegates will meet in the afternoon beginning at noon with a luncheon meeting of the Council.

Delmarva foundation

Dr. Fastow called upon Christian E. Jensen, M.D., M.P.H., president and corporate medical director of the Delmarva Foundation for Medical Care, Inc.

Dr. Jensen briefed the Council on HCFA's new approach to improving care for Medicare beneficiaries through a program called "The Health Care Quality Improvement Initiative" (HCQII). This program will be embodied in HCFA's fourth scope of work. Dr. Jensen also provided Council members with copies of several articles that appeared in the August 19, 1992, issue of *JAMA,* which describe this program.

Meeting with Marilyn Goldwater

Dr. Fastow stated that a meeting was held with Marilyn Goldwater, executive assistant to the governor, who discussed a proposal for health initiatives that would focus on preventive health care. Dr. Fastow further stated that Ms. Goldwater indicated that funds were needed to support the governor's mobile health van, which is a part of this proposal. This matter was presented for information purposes only, since it was still in the formative stages.

BCBSM Medicare payment performance

Dr. Fastow stated that Council was provided material from Congressperson Ben Cardin pertaining to BCBSM's plan to improve its performance (i.e., timely processing of claims, reduction of electronic Medicare claims (EMC) rejections, and prompt and accurate transfer of Medicare crossover claims to Medicaid). This material was provided for information purposes only.

Submission of acupuncturist resolution to the AMA

Dr. Fastow called upon Jose Martinez, M.D., who presented recommendations and a resolution pertaining to acupuncture on behalf of Margaret Mullins, M.D., who was unable to attend.

Council moved and approved the following recommendations that

1. Med Chi adopt a position supporting any state legislation that would remove all limitations on the physician in the practice of acupuncture.
2. Med Chi would not oppose legislation that would create a nonphysician board of acupuncture within the BPQA to address the needs of nonphysicians.

Council also moved and approved the resolution on acupuncture, which will

be forwarded to the Maryland AMA Delegation for editing, then submitted to the AMA for consideration at the I-92 (Interim 1992) meeting in December.

Resolved, That the AMA adopt a policy that physician practice of acupuncture should only be regulated directly by state medical boards, and not by predominately nonphysician advisory committees.

Lobbying/legal services

Dr. Fastow stated that discussions have taken place with the law firm of Rifkin, Evans, Silver, and Rozner as a follow-up to the firm's suggestion that the Faculty provide its own legal services. As a result of those discussions, a mutual agreement had been reached whereby Med Chi would separate its legal service from its lobbying services. It was the consensus of the Council to accept the chairperson's announcement, as indicated by there being no objection to the report of the chairperson, and also by Council's applause of the chairperson's announcement. Dr. Fastow further stated that Med Chi would maintain its agreement with Rifkin, Evans, Silver, and Rozner for lobbying services. Negotiations were currently underway, and an update would be provided to the Executive Committee at its next meeting.

Adjournment

There being no further business, the meeting adjourned at 2:35 p.m.

CAROL W. GARVEY, M.D.
Secretary ■

House of Delegates Minutes

Medical and Chirurgical Faculty of Maryland
House of Delegates (338th meeting)
Saturday, September 19, 1992

The 338th meeting of the House of Delegates of the Medical and Chirurgical Faculty was held on Saturday, September 19, 1992 at the Princess Royale Hotel in Ocean City, MD.

Present were the following delegates:

Allegany

Rubustiano J. Barrera, M.D.[1]
Frederick Miltenberger, M.D.
Leslie R. Miles, Jr., M.D.[6]

Baltimore City

Raymond M. Atkins, M.D.[6]
Paul Burgan, M.D.
Beverly A. Collins, M.D.
Augusto R. DeLeon, M.D.
Donald H. Dembo, M.D.[6]
Willarda V. Edwards, M.D.
Albert Folgueras, M.D.
Frank A. Giargiana, Jr., M.D.
Susan R. Guarnieri, M.D.[6]
Rafael C. Haciski, M.D.
Claude D. Hill, M.D.
Thomas E. Hunt, M.D.
John B. MacGibbon, M.D.
Donald W. Mintzer, M.D.
Hiroshi Nakazawa, M.D.[6]
Samuel I. O'Mansky, M.D.
Stephen K. Padussis, M.D.
William B. Russell, M.D.[1]
Bernard R. Shochet, M.D.
Roland T. Smoot, M.D.[3,6]
George Taler, M.D.[1]
Karl H. Weaver, M.D.
Jose M. Yosuico, M.D.[2]
Joseph W. Zebley III, M.D.

Baltimore County

Thomas E. Allen, M.D.[6]
Marianne Benkert, M.D.[6]
Albert L. Blumberg, M.D.[2,6]
Harold B. Bob, M.D.[6]
Herman Brecher, M.D.
Louis C. Breschi, M.D.[6]
Esther Edery, M.D.[6]
Scott D. Hagaman, M.D.[1]
Richard M. Hirata, M.D.
Deusdedit Jolbitado, M.D.
Jose Martinez, M.D.[1]
Ronald Jay Orrell, M.D.

Calvert County

Joseph Fastow, M.D.[2,6]
Alexander Panos, M.D.

Caroline County

Christian Jensen, M.D.[6]

Cecil County

Andrew P. Fridberg, M.D.

Charles County

Khadar Baig, M.D.
Guillermo Sanchez, M.D.[6]

Dorchester County

Mohammad Walid Kamsheh, M.D.[1,6]
Paul A. Stagg, M.D.[4]

Harford County

Frederick J. Hatem, M.D.[6]
Benjamin Oteyza, M.D.

Howard County

Allan T. Leffler II, M.D.[6]
Melvin S. Rapelyea, M.D.
Charles E. Taylor, M.D.

Kent County

John C. Arrabal, Jr., M.D.
Maria C. Boria, M.D.

Montgomery County

Benjamin Avrunin, M.D.
Carol L. Bender, M.D.[4]
Barbara L. Blaylock, M.D.
David B. Doman, M.D.[1]
Carol W. Garvey, M.D.[2,6]
Joseph J. Genovese, Jr., M.D.[1]
Barton J. Gershen, M.D.[6]
Sarah A. Leonhard, M.D.[1]
Ralph E. Longway, M.D.
Edward S. Mehlman, M.D.
John P. Nasou, M.D.
Alphonsus O. Obayuwana, M.D.[1]
Bruce E. Rubin, M.D.[4]
Philip L. Schneider, M.D.
Mark S. Seigel, M.D.
Peter B. Sherer, M.D.[6]
Margaret T. Snow, M.D.
Joseph Snyder, M.D.[2,6]
Donald S. Stepita, M.D.[6]
Stephen G. Vaccarezza, M.D.
Isaac Weiszer, M.D.[1]
Stephen W. White, M.D.[6]

Prince George's County

Brian S. Bayly, M.D.
Riad Dakheel, M.D.
Stuart J. Goodman, M.D.[1,6]
Zorayda M. Lee-Llacer, M.D.
John Richard Lilly, M.D.
Benjamin Maldonado, M.D.[2,6]
George S. Malouf, Jr., M.D.
Mary B. Maloney, M.D.[1]
George S. Malouf, Sr., M.D.[3,6]
Abdul Nayeem, M.D.[1]
David N. Robb, M.D.
Robert Ruderman, M.D.
Eli A. Sayan, M.D.
Frederick Wilhelm, M.D.[1]

Queen Anne's County

John R. Smith, Jr., M.D.[4]

St. Mary's County

J. Roy Guyther, M.D.[4]
Mohamed F. Lafeer, M.D.

Talbot County

L. Thomas Divillo, M.D.[1,6]
Donald T. Lewers, M.D.[3,6]
Richard R. Stephenson, M.D.[1]

Washington County

Edward W. Ditto III, M.D.
J. Ramsay Farah, M.D.[1,6]

Wicomico County

Alex Azar, M.D.[2,6]
Hilda I. Houlihan, M.D.[6]
Deepak Saggar, M.D.

Worcester County

Federico G. Arthes, M.D.[4,6]

Student Component

Michael D. Huber

Specialty Societies

Jay Gerstenblith, M.D.

[1]Alternate, [2]Officer, [3]AMA Delegate, [4]Delegate and Councilor, [5]Also voting Delegate, [6]Councilor

Past presidents

Raymond M. Atkins, M.D.[5]
Michael R. Dobridge, M.D.
J. Roy Guyther, M.D.[5]
Reynaldo Lee-Llacer, M.D.[5]
Donald T. Lewers, M.D.[5]
George S. Malouf, Sr., M.D.[5]
Roland T. Smoot, M.D.[5]

Also present were the following executive directors:

Neilson Andrews, Baltimore County Medical Association;
Diane Briggs, Prince George's County Medical Society;
Bernadette Lane, Baltimore City Medical Society; and
Edward Shanbacker, Montgomery County Medical Society.

The Faculty's executive director, Angelo J. Troisi, F.A.C.H.E., was present, as well as other members of the Faculty's staff, including Joseph Harrison, associate executive director; Rose M. Matricciani, R.N., J.D., assistant executive director for healthcare policy; and Carmine M. Valente, Ph.D., deputy executive director.

The parliamentarian was William Evans, Esq.

[1]Alternate, [2]Officer, [3]AMA Delegate, [4]Delegate and Councilor, [5]Also voting Delegate, [6]Councilor

Call to order:

The 338th meeting of the House of Delegates for the 1992 semi-annual meeting was called to order by the president and presiding chairperson, Jose M. Yosuico, M.D., at 1:40 p.m. in the Palmetto Rooms 1, 2 and 3 of the Princess Royale Hotel in Ocean City, Maryland.

Invocation

Leslie R. Miles Jr., M.D., chairperson of the Committee on Medicine and Religion, delivered the invocation.

Pledge of allegiance

A videotape provided by the Maryland Public Broadcasting System was played to lead the House of Delegates in a pledge of allegiance.

Approval of minutes

The minutes from the two House of Delegates sessions held during the annual meeting on Thursday, April 30, 1992, and Saturday, May 2, 1992, which had been approved by the Executive Committee, were adopted by the House of Delegates.

Presentation by Joseph T. Painter, M.D.

Joseph T. Painter, M.D., president-elect of the American Medical Association (AMA), thanked the Faculty for its help with "Health Access America."

Dr. Painter stated that the ideas of each state society are very important and that Maryland has strong leaders to carry forth its ideas to the AMA in Dr. Lewers and Malouf. He said that Drs. Lewers and Dr. Wagner were on two important AMA committees—scientific affairs and legislation. He also mentioned that Dr. Lewers was being put forth as a trustee. Dr. Painter added that the AMA needs the knowledge, skills, and experience of Dr. Lewers.

In discussing what the AMA was about, Dr. Painter noted that the other 49 states also have sent forth representatives who are as knowledgeable and skilled as our delegates to the House of Delegates of the AMA. Additionally, 75 specialty societies are included. With these numbers in mind, the viewpoints of the AMA reflect 95 % or more of the doctors in this country. The AMA gains its strength from the people sent forth by the states, and the AMA needs that strength and input. One idea carried out of Maryland can literally change an AMA policy.

Mr. Painter remarked on the importance of communication, stating that the public does not know what it really costs for health care today and doesn't generally like physicians, although individuals like their personal physician. The public doesn't recognize the change in value that has occurred. He also stated that we need to get the public to realize that we are on their side in fighting for the best care. The return to the patient as a number one concern should be the practice focus.

Dr. Painter stated that together, physicians can become a powerful force that can say what is going to happen to medicine. He also announced that "...we must fight those groups that over-regulate us...." He believes physicians must rebuild the ethical network all over the country.

Dr. Painter assured the audience that the AMA also wants to maintain its scientific base; the AMA is seeking to create a strong team.

At the conclusion of Dr. Painter's presentation, the chairperson, Dr. Jose Yosuico, presented Dr. Painter with a certificate of recognition.

Awards

a. Seventh annual media awards

Daily Newspaper Category:

Marlo Barnhard, "Harold Churchey: Man with a vision," *The Herald Mail,* Hagerstown.

Non-Daily Newspaper and Magazine Category:

Jeanne Beach, "Attention Turns to Alzheimer's," Homestead Publishing Company.

Special Mention in the Non-Daily Newspaper and Magazine Category:

Lynne Salisbury, "Balancing Acts: How young people and their families cope with diabetes," *Columbia Flier.*

Radio Category:

Marian Koubek, "An element of danger," WPOC-FM.

Television Category:

Lisa Willis and Scott Livingston, "Around the Clock Care," WBFF-TV.

b. *Maryland Medical Journal (MMJ)* Awards

It was noted that the winners of the *MMJ* awards were Mary Betty

Stevens, M.D., practitioner award, for "Clinical spectrum of SLE," October 1991; and Santa J. Johnston, M.D., resident award, for "Inflammatory pseudotumor of the retroperitoneum," September 1991.

c. Auxiliary awards

The chairperson presented to Elizabeth Lindhardt a governor's citation for her work over the past many years in coordinating the AMA-ERF funds and noted that through her hard work, the three medical schools in Maryland have received almost $300,000 during the past few years. Mrs. Lindhardt was also presented with a certificate of recognition by Med Chi and received flowers from Dr. Jose M. Yosuico, president.

The chairperson presented Mrs. Myrna Goodman, president of the auxiliary, with a governor's citation for the work auxiliary members accomplished in helping with the legislative program. Mrs. Goodman accepted the award on behalf of the auxiliary.

d. Award for Donald T. Lewers, M.D.

The chairperson presented Donald T. Lewers, M.D. with a governor's citation for bringing so much credit to Maryland physicians through his efforts with the AMA and on the various committees he has worked on for the AMA.

e. 50-year award

Dr. Yosuico called I. Rivers Hanson, M.D. to come forward to receive his 50-year membership award. The chairperson also called upon Dr. "Ted" Lewers to assist in the presentation as both physicians were from the same area. After Dr. Lewers made the presentation to Dr. Hanson, Dr. Hanson spoke on some of his experiences during the 50-year period. He stated that one of the most interesting experiences he had was in delivering a baby who was later named Donald "Ted" Lewers. Dr. Lewers thanked him very much for his comments and for the act of delivering him.

Council report

a. Emeritus membership

Joseph Fastow, M.D, chairperson of Council, presented the Council report. Dr. Fastow asked that the reading of the members who wished to be granted emeritus membership be dispensed with since the names were listed in the agenda as follows:

Allegany County
Amado P. Torres, M.D.

Anne Arundel County
Edwin Davis, M.D.
John L. Pitts, M.D.

Baltimore City
Robert M. Heyssel, M.D.

Baltimore County
Morton J. Ellin, M.D.
Bernard S. Gordon, M.D.
Marcos Levin, M.D.
Anthony A. Lewandowski, M.D.
James E. Rowe, Jr., M.D.
Mehdi L. Yeganeh, M.D.

Howard County
Elwood H. LaBrosse, M.D.

Montgomery County
Horace W. Bernton, M.D.
Leo P. Hennigan, M.D.
James L. Laubach, M.D.
Baltazar E. Perez, M.D.

Prince George's County
Bernard F. Peacock, M.D.

Wicomico County
Richard E. Hughes, M.D.

The House of Delegates approved the emeritus membership of the above-mentioned members.

b. Waiver of dues

Dr. Fastow then asked that the following individual be granted a waiver of dues:

Baltimore County
Franklin D. Israel, M.D.

The House of Delegates approved the waiver of dues.

c. Council resolutions

(1) Baltimore County resolution

Dr. Fastow noted that the Council at the July 16 meeting amended a resolution submitted by Baltimore County Medical Association to adopt AMA Report BBB, "Enforcement of the Code of Ethics (I-91)" and forwarded it to the House of Delegates for consideration of adoption.

The resolution states:

> *Resolved*, That the Medical and Chirurgical Faculty of Maryland support the implementation plan of the American Medical Association for enforcement of the code of ethics.

Louis C. Breschi, M.D. of the Baltimore County Medical Association, the association that had presented the resolution, stated that he would like to make a friendly amendment to change the resolution as follows: "...American Medical Association AS OUTLINED IN THE AMA INTERIM REPORT BBB 1991." (changes are in CAPS.)

Dr. Breschi's amendment to the resolution was seconded and passed. The chairperson noted that the question was on the amendment to the resolution to delete "for enforcement of the code of ethics" and to add "as outlined in the AMA Interim Report BBB 1991."

The amendment to the resolution was passed.

The chairperson stated that the question now was on the entire resolution.

Dr. Lewers questioned what the resolution was all about. Dr. Breschi stated it just supported the direction the AMA was going toward on self-regulation. Mr. Angelo J. Troisi, executive director, noted that this resolution, which encompasses Report BBB, has to do with an implementation plan from the AMA to develop a communications system of all the states and of all the specialty societies, etc., with regard to making sure that everyone throughout that entire system is aware of potential ethical problems.

After much discussion, a motion was made to postpone the adoption of this resolution by the House indefinitely. The motion was seconded and passed.

The House of Delegates adopted the position to postpone indefinitely this resolution.

(2) Prince George's County resolution

Dr. Fastow noted that at the July 16 Council meeting, the Council moved and approved to forward a Prince George's County resolution on self-referral to the House of Delegates for adoption.

The resolution states:

> *Resolved,* That the Medical and Chirurgical Faculty of Maryland support current Maryland law (Md. Health Occ. Art. 1-206), the current Faculty Ethical Opinion (§405), and the current AMA position (the New Jersey resolution) approved by the House of Delegates (A92), all of which require disclosure and allow medically necessary referrals to off-site facilities in which physicians have a financial interest; and be it further
>
> *Resolved,* That the Medical and Chirurgical Faculty of Maryland oppose any action which would contradict the aforementioned policy.

Dr. Fastow stated that additionally, Council heard at the July 16 meeting the report of the Committee on Professional Ethics on the same subject as self-referral, and Council referred this issue to the Legislative Committee for review and consideration and directed the Legislative Committee to report recommendations to the House of Delegates at this time.

A mention was made by Baltimore City to add a third resolve as follows:

> *Resolved,* That the Medical and Chirurgical Faculty supports a strong utilization review mechanism administered by the Board of Physician Quality Assurance.

The motion was moved and seconded.

The chairperson stated that the question was on the adoption of the third resolve.

In regard to this resolve, Mr. Troisi noted that there was an amendment to the Board of Physician Quality Assurance Law this year that will be effective October 1, 1992. The "gross and willful overcharging" as grounds for acting on a physician's license has been replaced with "overutilization of medical services." Mr. Troisi noted that Med Chi has supported this bill.

Carol W. Garvey, M.D. of the Montgomery County Medical Society made a motion to amend the resolve presented by Baltimore City to delete "administered by the Board of Physician Quality Assurance." The motion was seconded and the amendment to the amendment was seconded to strike out the words "administered by the Board of Physician Quality Assurance." The amendment to the amendment was passed.

The chairperson noted that the question now was on the adoption of the amendment as amended. A discussion ensued. Dr. Bob stated he was against the resolution and that we should be concerned with professionalism. He noted that Dr. Painter had said, "The heart of professionalism is the adherence to a set of standards and a mode of behavior which is higher than civil law...."

The chairperson recognized Lawrence Holder, M.D. of Baltimore County, president of the Maryland Radiological Society, in as much as Dr. Holder is not a delegate and therefore not a member of the House of Delegates. Dr. Yosuico indicated that on an issue as important as this, he would allow Dr. Holder to speak unless there was any objection. Hearing no objection, Dr. Yosuico recognized Dr. Holder. Dr. Holder stated that Med Chi needed "to foster the unity that we all need...and that we not perpetuate disharmony." Dr. Holder stated that the passage of these resolutions as written would continue to create some confusion and divisiveness.

Dr. Holder continued that the Maryland Radiological Society had some concerns with the title, the current ethical opinion of the AMA Council on Ethical and Judicial Affairs is not referenced in the first resolve, the New Jersey resolution oversimplifies the problem, and in the second resolve, the term "self-referral" means so many things to so many people that this subject cannot be discussed in the abstract. Dr. Holder suggested that in the spirit of harmony, the matter be referred to the Legislative Committee so that when specific issues come up they can be debated.

A discussion then proceeded on the entire matter. Dr. Breschi stated that he would speak against the resolutions. He noted that the subsection number was incorrect in the first resolve.

He stated that Med Chi's current ethical opinion is not §405, but is the one that was passed in March 1992 in support of the AMA resolution to support the Ethical Judicial opinion I-91. He then moved to submit a substitute resolution which was:

> Move to reaffirm the AMA's interim policy on self-referral as accepted and filed in December 1991 and approved by Med Chi Council in March 1992. And further, that the medical society take a neutral position on legislation until the submitted legislation can be reviewed by the Legislative Committee.

The chairperson noted that it had been moved and seconded to substitute the following:

> Move to reaffirm the AMA's policy on self-referral as accepted in December 1991 and approved by Med Chi Council in March 1992 and the medical society take a neutral position until the submitted legislation can be reviewed by the Legislative Committee.

Dr. Azar spoke against the substitute resolution. He commented that he believed that the AMA's position would be the policy approved during the A-92 meeting in Chicago when the House of Delegates adopted Resolution #5 (New Jersey), which allowed for self-referral with disclosure. Dr. Zebley moved to refer the resolutions back to the Legislative Committee for better language, to write them correctly, and

to reintroduce them. The motion was seconded.

Dr. Martinez asked for a point of personal privilege. He noted that this matter had been referred by the Council to the Legislative Committee and had been discussed by the committee, and that the committee had adopted the AMA 1992 position that self-referral was not unethical with disclosure, which he stated was the current Maryland law.

Dr. Blumberg inquired whether Dr. Martinez was making a motion that instead of referring the matter to the Legislative Committee that it be referred to a special committee.

Dr. Martinez stated that he had made no motion and had opposed no motion, but merely stated fact. Dr. Martinez noted that an AMA paper entitled "Physician Self-Referral" states that during the 1982 annual meeting, "the AMA has never advocated the development of legislation and the ethical opinion was not intended to be viewed as a model bill. The Council on Ethics and Judicial Action believes that physicians can be trusted to resolve conflicts appropriately in general. Physician investment has been good for patients." Dr. Martinez noted that he has talked to the chairperson of the AMA Council on Ethical and Judicial Affairs, who reassured him that there is a fundamental difference in having an ethical opinion that guides your behavior, and having a policy decision that makes your behavior.

Dr. Stagg spoke against the resolution. He noted that this was not a matter of legislation, but a matter of policy.

Dr. Bob stated that we needed to look at the ethical view as well as the legislative view and revise them. He moved that Dr. Zebley's motion be amended to send this to an ad hoc committee to study, rather than have a blanket ethical or unethical statement.

The chairperson noted that it had been moved and seconded to strike out the Legislative Committee and insert a special committee appointed by the president. The question was called. It was announced that the issue failed. The matter will not be referred to a special ad hoc committee. The House asked for a recount of votes. Drs. Fastow and Atkins were appointed as tellers, and delegates were asked to stand to vote. On re-count, the motion was adopted that states: A special committee to study the self-referral issue will be appointed by the president. The matter will not be referred to the Legislative Committee.

It was noted that other matters on this issue were pending. It was then moved to send this and all pertaining matters to be addressed to the ad hoc committee for further report.

d. Physician x-ray aide program

Dr. Fastow reported on the physician x-ray aide program. He stated that Med Chi has been successful in obtaining interest from several community colleges to deliver the course and examination once the examination has been approved by the Maryland Radiological Society. He noted that in order to assist the community colleges, Med Chi was conducting a survey of its membership to determine the number of individuals who need training, and their time considerations and locality needs, and that survey forms had been sent to all Med Chi physicians. He asked physicians to pick up a survey form and return it to the registration desk.

Legislative Committee Report

Jose Martinez, M.D., chairperson of the Legislative Committee, presented the committee's report. He noted that the Legislative Committee had taken a number of actions. Dr. Martinez noted that of the three issues he was originally going to discuss, the issue of self-referral had already been disposed of by the House of Delegates by referring it to a special committee.

The second issue on acupuncture was referred by Council on September 18.

Dr. Martinez noted that the remaining issue concerned the abortion issue, which was presented to the Legislative Committee by Dr. Goodman. Dr. Martinez presented the Legislative Committee motion for discussion by the House of Delegates:

That the Legislative Committee refers to the House the decision to debate the obligations of Med Chi with reference to adopting a position with regard to Referendum Question No. 6 dealing with termination of pregnancy and to recommend a policy.

Dr. Blumberg noted that Dr. Goodman had made a motion to the Legislative Committee that Med Chi take a public position of support, based on public health considerations, for the "yes" position on Referendum Question No. 6, regarding the termination of pregnancy under the state abortion law. However, Dr. Blumberg stated that Med Chi should debate on whether to take a position on Referendum No. 6 and what that position should be.

Dr. Blumberg made a motion that Med Chi publicly support the passage of Referendum No. 6.

Dr. Shochet stated that Baltimore City Medical Society believed Med Chi should take a different position and made a substitute motion: The physicians of Maryland do not advocate abortion. However, we believe there should be greater emphasis on the availability of education and the means to prevent pregnancy. Further, we believe that it is imperative that any surgical procedure, including abortion, be performed in a sterile atmosphere and only after the patient has undergone counseling, including the consideration of alternatives to the procedure.

The chairperson noted that this was a substitute motion and received an appropriate second.

A motion was made to amend by adding at the end of the substitute motion, "Med Chi is in support of Referendum No. 6."

Dr. Hatem of the Harford County Medical Society spoke against the motion and made a substitute motion that the medical society take no position on Referendum No. 6 on abortion. The chairperson noted that was not a motion that could be accepted since by voting "no" on the question would mean that we would take no position. Dr. Hatem stated he believed there was a difference. He stated he wanted to make a substitute motion: "I move Med Chi have no position on abortion." That motion was seconded.

Several physicians spoke in favor of taking no position.

The chairperson called the question.

The House of Delegates passed the substitute motion made by Dr. Hatem that Med Chi take no position on abortion.

Committee reports

The chairperson noted that the committee reports contained no recommendations or resolutions and that all of them were for the 1991-1992 organizational year.

Maryland Medical Political Action Committee report

John Lynn, M.D., chairperson, Maryland Medical Political Action Committee (MMPAC), noted that in 1992, MMPAC received the American Medical Political Action Committee (AMPAC) award for being the society with the second highest increase in members and the third highest in increased revenue. Dr. Lynn noted that MMPAC needed everyone's support, that it was each physician's responsibility to act as an advocate in health matters, and that to do this, physicians need to join AMPAC and MMPAC. Dr. Lynn stated that these groups speak on upcoming changes and that in January 1993, issues on national health care will be discussed.

Treasurer's report

Albert Blumberg, M.D., treasurer, asked that the certification of the accountants with respect to the annual report be approved. The auditors reported that the financial statements represent fairly, in all material respects, the financial position of the Medical and Chirurgical Faculty at December 31, 1991, and 1990, and the results of its operations, changes in fund earnings, and cash flows for the year then ended are in conformity with generally accepted accounting principles.

Dr. Blumberg noted that under the previous chairperson to the Finance Committee, Dr. Bearman, a change was made in the custodian for the endowment and pension funds. Med Chi is no longer paying a fee to have these accounts handled, and this has resulted in an annual saving of $24,000 to Med Chi on administration fees.

The House approved the certification of accountants. Dr. Blumberg noted that Med Chi was solvent.

Policy resolutions

The chairperson called upon Carol W. Garvey, M.D., secretary, to read the staff report on the review of policy resolutions adopted five years ago. Dr. Garvey asked that the House reaffirm the following resolutions adopted in 1987:

Resolution 1A/87

Resolved, That the Medical and Chirurgical Faculty go on record as encouraging its members and, indeed, all of the physicians of Maryland, to maintain as their top priority the quality care of each individual patient, and that should there be a conflict between quality of care and regulations promulgated by the Delmarva PRO, quality care must always take precedence.

Resolution 1S87 (a)

Resolved, That all members of the Medical and Chirurgical Faculty of Maryland will demonstrate a continuing interest in providing quality care for the elderly by actively studying the issues, opposing policies detrimental to quality, accessibility and availability of appropriate care for all Americans and constantly evaluating the health care needs of the elderly citizens of Maryland.

Resolution 1S87 (b)

Resolved, That the standards of treatment for elderly citizens as well as all Marylanders shall not be compromised due to political concerns not in the best interests of the individual patient's well-being or continued high quality of life.

Resolution 1S87 (c)

Resolved, That all members of the Medical and Chirurgical Faculty will continue to exhibit sensitivity and responsiveness to the financial status of the elderly population and will consider the patient's financial situation when making a determination whether or not to accept Medicare assignment.

Hearing no objections, the chairperson stated that the resolutions would remain in effect.

Reference Committee report

Ralph E. Longway, M.D. stated that the Reference Committee held a public hearing on three resolutions that had been submitted for action, two from Prince George's County Medical Society and one by an individual physician.

a. Firearms injuries and deaths resolution

The first resolution entitled "Firearms Injuries and Deaths," submitted by Prince George's County Medical Soci-

ety, was presented to the House for adoption as follows:

> *Resolved,* That the American Medical Association draft and use its best offices to have enacted national legislation to require that the owner and operator of a firearm meet certain criteria, similar to the criteria that the owner and operator of a motor vehicle must meet, i.e., be of a certain age, physical and mental condition, and be required to demonstrate knowledge and skill in proper use of that firearm.

Dr. O'Mansky stated that the Baltimore City delegation supported the resolution. Dr. Lilly stated that Prince George's County delegation supported the resolution. Dr. Edery from the Baltimore County Medical Society stated that the society should adopt this resolution.

An amendment to this motion was made by Dr. Gillman to add as follows:

> We urge our state legislators to consider a significant tax on handguns and bullets to help offset the cost of violence in our streets which is increasing.

The amendment, which was seconded, was adopted by the House of Delegates.

Dr. Hatem made a motion to reconsider the issue of the new tax. The chairperson stated that the question is to reconsider the vote on the amendment.

The House passed the motion to reconsider the added amendment regarding a tax. After some discussion, there was a call for the question and the House of Delegates did not adopt the amendment that included the tax.

The original motion was now on the floor. The question was called.

The motion was approved by the House of Delegates as originally submitted.

The resolution was adopted by the House of Delegates as originally submitted, which was:

> *Resolved,* That the American Medical Association draft and use its best offices to have enacted national legislation to require that the owner and operator of a firearm meet certain criteria, similar to the criteria that the owner and operator of a motor vehicle must meet, i.e., be of a certain age, physical and mental condition, and be required to demonstrate knowledge and skill in proper use of that firearm.

b. Imprinting of solid oral dosage form drug products

Dr. Longway then presented the second resolution to be considered, entitled, "Imprinting of solid oral dosage form drug products," submitted by the Prince George's County Medical Society as follows:

> *Resolved,* That the Medical and Chirurgical Faculty of Maryland adopt as its policy an intention to see legislation introduced into the Maryland General Assembly calling for the statutory requirement of imprinting for identification of all generic solid oral drug products.

After some discussion, the question was called and the resolution was adopted as submitted.

c. Litigation initiation fund

The resolution, submitted by Robert Ruderman, M.D., entitled "Litigation initiation fund, read as follows:

> *Resolved,* That the fund be financed by a one-time $100 assessment of each Med Chi member; and be it further
>
> *Resolved,* That new members be assessed during their second year of membership and that resident and medical student members be absolved from the assessment; and be it further
>
> *Resolved,* That the fund be administered separately from the general fund by a distinct board appointed by the Council of the Medical and Chirurgical Faculty of Maryland.

The question was called and the resolution was not adopted.

Bylaws report

Alex Azar, M.D., chairperson of the Bylaws Committee, presented the committee's report and recommended adoption of all of the items. He noted that Items 8a and b had been withdrawn for further evaluation.

After the report was presented, Items 3, 4, 6, and 7 were extracted.

The chairperson asked for a vote on Items 1, 2, 5, 9, 10, and 11. These items were adopted by the House of Delegates and were as follows:

1. Article III—Finance, Section 3.

Section 3. Within 30 days of the admission of a new member by a component society, that component society shall forward to the Faculty the member's name, address, and date of admission with the appropriate dues. In the case of a member who has transferred his membership, the component society to which his/her membership has been transferred shall forward to the Faculty the member's name, address, and date of admission, stating the name of the component society from which the member transferred.

2. Article I—Component societies, Section 4.

Section 4. Component societies shall be the judges of the qualifications of their own active members, provided that (apart from any component society composed exclusively of student members) they may admit to membership every reputable and legally registered doctor of medicine who does not practice, claim to practice, or support any exclusive system of medicine and who (1) is not an active member of another component society, (2) practices medicine within the component society's geographical area, and/or (3) maintains his/her residence within its area. If, due to moving either his/her practice or residence, a physician becomes ineligible to continue his/her membership in a component society, his/her membership must be transferred (to the

appropriate component society within 60 days) unless the physician wishes to retain his/her current membership.

5. Article VII—Council, Section 3.

Section 3. Immediately following the close of the annual session of the House of Delegates, the Council shall elect a chairperson and vice chairperson from among its own membership who shall serve for one year or until their successors are elected. The Council chairperson shall act as "speaker" of the Council and shall assume duties related to the accomplishment of the business of the Council. It shall be the duty of the chairperson to preserve order and to follow proper parliamentary procedures. The chairperson shall ensure the smooth flow of information during Council meetings, ensuring the voice of the minority is heard as well as the will of the majority is assured. The chairperson will ensure the free exchange of all debate and ensure committees report with clarity. The Council chairperson shall act as moderator for all Council debates. The chairperson's duties are confined to this role, and exclude any relationships with outside agencies except as designated by the president.

9. Article XI—Committees, Section 27 (new) Mediation Committee

Section 27. A mediation committee shall consist of not less than nine members who shall serve on a three-year staggered-term basis. The president shall select one-third of its members each year for a three-year term. The president will also appoint the chairperson. The committee shall be responsible only for the mediation of fee disputes referred by the Board of Physician Quality Assurance under guidelines and procedures developed by this committee and approved by Council. No member of this committee may serve concurrently on a peer review committee of the Faculty or a component society while a member of the committee.

10. Article XIV—Parliamentary authority

The rules contained in the current edition of *Rules of Order* by James E. Davis, M.D. shall govern the Faculty in all cases to which they are applicable and in which they are not inconsistent with these Bylaws. In the event an issue is not addressed in the rules of order, then *Robert's Rules of Order Newly Revised* shall govern the faculty.

11. Article XI—Committees, Section 6(a)

Section 6. Section 6. Approximately half of the delegates and alternates to the American Medical Association

(a) shall be nominated and elected in the same manner and at the same time as that provided for the elective officers. Their terms shall begin on January 1 of the year following their election and they shall serve for a term of two years or until their successors are elected, provided that this provision shall be implemented in a manner that does not shorten the term of any delegate elected prior to its adoption.

The chairperson then called on Dr. Azar to read each extracted item for discussion. Dr. Azar presented the following items:

3. Proposed Bylaw Amendment to Article VIII—Executive committee, Section 1.

Rationale: Increasing the size of the Executive Committee by including the elected vice presidents and chairperson of the AMA delegation would make the Executive Committee more democratic and allow for additional representation. It would also make it more difficult for an individual or small group of individuals to dominate the affairs of the society and would allow the elected vice presidents to be more active in the Faculty's affairs.

Including the chairperson of the AMA delegation on the committee would provide the input of the AMA on issues affecting the Faculty.

Amend Article VIII, Section 1 as follows: (CAPS indicate change.)

Section 1. The Executive Committee shall consist of the president, the president-elect, the immediate past president, the secretary, the treasurer, THE CHAIR OF THE AMA DELEGATION, THE THREE VICE PRESIDENTS, and the chairperson and vice chairperson of the Council.

Discussion: Substitute amendments were introduced by the Baltimore County Medical Association and the Montgomery County Medical Society but were ruled out of order by the parliamentarian because they had not been presented within the 30-day announcement period. A recommendation was made to refer the amendment back to the Bylaws Committee. After some discussion, the motion was deferred and the original motion presented by the Bylaws Committee was called and adopted by a majority vote.

The amendment was adopted by the House of Delegates as follows:

Section 1. The Executive Committee shall consist of the president, the president-elect, the immediate past president, the secretary, the treasurer, the chairperson of the AMA Delegation, the three vice presidents, and the chairperson and vice chairperson of the Council.

4(a). Proposed Bylaw Amendment to Article IV—Officers, Section 1.

Rationale: To more clearly define the role of the president of Med Chi. (If approved, this section shall be effective after the conclusion of the 1993 annual meeting.)

Amend Article IV, Section 1 as follows: (CAPS indicate change.)

Section 1. The elective officers shall be a president, a president-elect, a first, second, and third vice president, a secretary, and a treasurer. THE PRESIDENT SHALL BE THE OF-

FICIAL SPOKESPERSON FOR THE FACULTY AND PRESIDE OVER THE MEETINGS OF THE HOUSE OF DELEGATES. THE PRESIDENT SHALL BE RESPONSIBLE FOR REPRESENTING THE FACULTY IN ALL MATTERS CONCERNING THE OPERATIONS OF THE FACULTY AND AS SUCH WILL BE THE OFFICER RESPONSIBLE FOR THE COORDINATION OF ALL FACULTY PROGRAMS WITH OUTSIDE AGENCIES, TO INCLUDE BUT NOT BE LIMITED TO: THE MARYLAND GENERAL ASSEMBLY, MEMBERS OF THE US CONGRESS, ALL STATE DEPARTMENTS, AND OTHER OFFICERS AND AGENCIES DEALING WITH THE FACULTY. THE PRESIDENT MAY DELEGATE ANY OF THESE DUTIES TO THE PRESIDENT-ELECT OR OTHER OFFICERS FOR CERTAIN EVENTS OR PERIODS OF TIME, BUT REMAINS RESPONSIBLE FOR THE EFFICIENT OPERATION OF THE PROGRESS OF THE FACULTY. THE PRESIDENT-ELECT SHALL ASSUME THE DUTIES OF THE PRESIDENT DURING ABSENCES OR PERIODS WHEN THE PRESIDENT IS UNABLE TO PERFORM THE DUTIES OF THE OFFICE.

The amendment was adopted by the House of Delegates.

4(b). Proposed Bylaw Amendment to Article VIII—Executive Committee, Section 3.

Rationale: In order to be consistent with Item 4(a) Article IV—Officers, there would be a need to change Section 3 to make the president, chairperson of the Executive Committee. The amendment also increases the quorum to six members instead of three. (If approved, this section shall be effective after the conclusion of the 1993 annual meeting.)

Amend Article VIII, Section 3 as follows: (CAPS indicate change, [ ] indicate deletion.)

Section 3. The Executive Committee shall meet at the call of the [chairperson of the Council] PRESIDENT or [two] SIX of its members. The [chairperson of the Council] PRESIDENT shall be chairperson. A quorum of the Executive Committee shall be [three] SIX of its members.

Discussion: A motion was made to make a substitute amendment to have the quorum be four instead of six. This motion was defeated.

The amendment was adopted by the House of Delegates as follows:

Section 3. The Executive Committee shall meet at the call of the president or six of its members. The president shall be chairperson. A quorum of the Executive Committee shall be six of its members.

6. Proposed Bylaw Amendment to Article IX—Board of Physician Quality Assurance, Section 2.

Rationale: Changes required by statute approved during the 1992 General Assembly.

Amend Article IX, Section 2 and add new Section 3 as follows: (CAPS indicate change, [ ] indicate deletion.)

[*Section 2.* Replacement members of the Board of Physician Quality Assurance to be seated each year shall be presented at the first meeting of the annual session of the House of Delegates, and twice the number of vacancies to be filled for that specific year shall be voted upon as the list of nominees to be submitted to the governor for appointment to the board. Vacancies on the board caused by death, resignation, or removal from office, shall be filled in accordance with the current Bylaws.]

SECTION 2. EACH YEAR PRIOR TO THE EXPIRATION DATE SET BY LAW FOR TERMS OF BOARD MEMBERS, FOR EACH IMPENDING INITIAL VACANCY, THE FACULTY SHALL NOTIFY ALL LICENSED PHYSICIANS IN THE STATE TO SOLICIT NOMINATIONS TO FILL THE VACANCY AND SHALL CONDUCT A BALLOTING PROCESS THAT PROVIDES ALL PHYSICIANS IN MARYLAND WITH AN EQUAL VOTE TO SELECT THE NAME OF THE LICENSED PHYSICIAN TO BE SUBMITTED TO THE GOVERNOR.

SECTION 3. ONCE APPOINTED TO THE BOARD, A PHYSICIAN NAMED ON THE LIST SUBMITTED BY THE FACULTY SHALL REMAIN ON THE LIST FOR TWO CONSECUTIVE FULL TERMS.

Discussion: A motion was made to add after "...balloting process" the words, "by the Executive Committee." The motion to amend the amendment was seconded and passed.

A motion was made to extract Section 3 of the amendment, which was approved. After discussion, which included the fact that Sections 2 and 3 were extracted verbatim from SB 674, the amended amendment was approved by the House of Delegates as follows:

Section 1. The Board of Physician Quality Assurance is composed of 15 active members, of which ten of its members shall be physicians recommended by the Faculty. It has such powers, duties, officers and meetings as are provided from time to time by law.

Section 2. Each year prior to the expiration date set by law for terms of board members, for each impending initial vacancy, the Faculty shall notify all licensed physicians in the state to solicit nominations to fill the vacancy and shall conduct a balloting process by the Executive Committee that provides all physicians in Maryland with

an equal vote to select the name of the licensed physician to be submitted to the governor.

Section 3. Once appointed to the board, a physician named on the list submitted by the faculty shall remain on the list for two consecutive full terms.

7. Proposed bylaw amendment to Article XI—Committees, Section 14, Legislative Committee

Rationale: Clarification of the role of the Legislative Committee.

Amend Article XI, Section 14 as follows: (CAPS indicate change, [ ] indicates deletion.)

[*Section 14.* A Legislative Committee shall consist of at least five members appointed by the president; one of whom the president shall designate as chairperson, together with the immediate past president (to act as liaison with the Council) and one member of each component society and specialty society, recognized by the Faculty, who are members in good standing of the Faculty, chosen by those societies annually. The Maryland Dental Association and the Auxiliary of the Medical and Chirurgical Faculty of Maryland shall have the right to choose one associate member of the committee. The committee shall inform itself on all legislation, national, state, and local, affecting the practice of medicine; advise the Faculty when necessary in regard to such legislation; and with the president or such other person as the Council or House of Delegates may name, represent the Faculty before any legislative body when required. This committee shall review all regulations, proposed by promulgation by any department or agency of the state of Maryland, affecting the practice of medicine, refer such proposed regulations to any standing committee of the Faculty having jurisdiction thereof, or, if there is no such standing committee, take jurisdiction of the subject matter itself and devise and develop a position on behalf of the Faculty with respect to any such proposed regulation.]

SECTION 14. A LEGISLATIVE COMMITTEE SHALL CONSIST OF THREE MEMBERS APPOINTED BY THE PRESIDENT, ONE OF WHOM SHALL BE DESIGNATED AS CHAIRPERSON, THE IMMEDIATE PAST PRESIDENT ACTING AS LIAISON WITH THE COUNCIL, A MEMBER OF THE FACULTY'S AMA DELEGATION DESIGNATED BY THE PRESIDENT ACTING AS LIAISON WITH THE AMA, ONE MEMBER FROM EACH COMPONENT SOCIETY, INCLUDING THE RESIDENT AND STUDENT COMPONENTS, ONE MEMBER FROM EACH SPECIALTY SOCIETY DESIGNATED BY THE SPECIALTY SOCIETY, ONE ASSOCIATE MEMBER DESIGNATED BY THE AUXILIARY OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND, ONE ASSOCIATE MEMBER DESIGNATED BY THE MARYLAND STATE DENTAL ASSOCIATION. ALL SUCH MEMBERS, IF MEMBERS OF MED CHI, SHALL HAVE THE PRIVILEGES OF VOICE AND VOTE. GUESTS AND OBSERVERS MAY BE INVITED AT THE PLEASURE OF THE CHAIRPERSON AND SHALL HAVE THE PRIVILEGE OF THE FLOOR IF RECOGNIZED BY THE CHAIRPERSON. THEY SHALL NOT HAVE THE PRIVILEGE OF VOTING. THE COMMITTEE SHALL INFORM ITSELF OF ALL LEGISLATION, INTRODUCED IN THE MARYLAND HOUSE AND SENATE, AFFECTING THE PRACTICE OF MEDICINE, ADOPT A POSITION WITH RESPECT TO SUCH LEGISLATIVE PROPOSALS, REPORT SUCH POSITIONS TO COUNCIL, AND, WHERE APPROPRIATE, SEEK THE ADVICE AND CONSENT OF COUNCIL. WHEN REQUIRED THE COMMITTEE SHALL BE PRIMARILY RESPONSIBLE FOR DEVELOPING TESTIMONY AND REPRESENTING THE FACULTY BEFORE LEGISLATIVE BODIES ALONG WITH THE PRESIDENT OR SUCH OTHER PERSON AS THE COUNCIL OR HOUSE OF DELEGATES MAY NAME. THE COMMITTEE SHALL ACT SIMILARLY ON ANY FEDERAL LEGISLATION, NOT WITHIN THE JURISDICTION OF A STANDING COMMITTEE OF THE FACULTY AND WHEN REQUESTED ASSIST IN DEVELOPING AND PRESENTING TESTIMONY TO FEDERAL LEGISLATIVE BODIES. THE COMMITTEE, WHEN REQUESTED, MAY ASSIST THE COMPONENT SOCIETIES IN RESPONDING TO LOCAL LEGISLATIVE INITIATIVES. WHEN DIRECTED BY THE EXECUTIVE COMMITTEE, THE COMMITTEE SHALL TAKE JURISDICTION OF A REGULATORY ACTIVITY NOT WITHIN THE JURISDICTION OF A STANDING COMMITTEE OF THE FACULTY AND DEVELOP A POSITION AS WELL AS, IF APPLICABLE, PRESENT TESTIMONY IN FRONT OF THE APPROPRIATE REGULATORY BODY WITH RESPECT TO SUCH PROPOSED REGULATION.

Discussion: After a great deal of discussion and debate, the recommendation of the Bylaws Committee was not approved by the House of Delegates.

The amendment was not approved by the House of Delegates.

8(a). Proposed Bylaw Amendment to Article XI—Committees, Section 25, Peer Review Committee

8(b). Proposed Bylaw Amendment to Article XI—Committees, Section 27, Physician/Patient Relations Committee

The two amendments were withdrawn by the Bylaws Committee at the request of the Peer Review Management Committee for further study.

AMA report

George S. Malouf, Sr., M.D., chairperson of the Faculty's AMA Delegation, noted that included in the packet was information regarding the last AMA meeting and that it was not necessary for him to give a verbal report.

Other business

Dr. Yosuico recognized Carol Bender, M.D., Montgomery County Medical Society, who made a motion, which was seconded and passed, that the House of Delegates direct the Faculty's officers and staff to inform legislators in Annapolis that:

1. Med Chi reaffirms its support of

   A. The current 1991 Maryland state disclosure law, and

   B. Senate Bill 654, The Board of Physician Quality Assurance bill, which provides a mechanism to monitor and censure over-utilization, and

2. Med Chi has established a special ad hoc committee to continue to study this very complicated and constantly evolving issue of self-referral to examine the effectiveness of the current Maryland laws (as stated above), and that this ad hoc committee will continue to study this issue of self-referral legislation.

It was agreed that this position would be presented during the September 22 hearing by Senator Paula Hollinger's Subcommittee on Medical Affairs of the Senate Economic and Environmental Affairs Committee who studied the issue and had held a meeting among principal personnel regarding self-referral, and Senator Hollinger will be informed that a position had been taken during the Faculty's semiannual meeting by the House of Delegates. The motion was seconded and passed as presented.

Adjournment

There being no further business, the House of Delegates was adjourned *sine die* at 4:20 pm.

Respectfully submitted,

CAROL W. GARVEY, M.D.
Secretary ■

PHYSICIAN PLACEMENT SERVICE

The Medical and Chirurgical Faculty of Maryland maintains a Placement Service for the convenience of Maryland physicians, hospitals, and communities in search of candidates for positions available in our state. A detailed description of such opportunities should be forwarded to:

Physician Placement Service
1211 Cathedral Street
Baltimore, MD 21201
410-539-0872 or 1-800-492-1056

Physicians wishing to locate in Maryland are invited to submit a résumé to be kept on file with the Physician Placement Service. Candidates are requested to inform the Faculty when they are no longer available for consideration for opportunities in Maryland.

MMJ **announcements for physician placements in the classified advertisements are charged at the regular classified advertising rate.**

Members in the News



B. STANLEY COHEN, M.D. was awarded the American Academy of Physical Medicine and Rehabilitation Recognition Award for Distinguished Clinicians. This award honors physiatrists who have achieved distinction through scholarly teaching and outstanding performance in patient care activities. Dr. Cohen is clinical professor of neurology at the University of Maryland School of Medicine. He received his medical degree from the University of Maryland and completed an internal medicine internship and residency at Sinai Hospital of Baltimore and the V.A. Hospital in Bronx, New York, and a physical medicine and rehabilitation residency at Baylor University Medical Center in Dallas, Texas. Dr. Cohen was formerly president and chief executive officer of Sinai Hospital of Baltimore and a former chairperson of the American Board of Physical Medicine and Rehabilitation. He is a member of many societies and organizations.



MARIA L. DEL ROSARIO, M.D. was elected president of the Charles County Medical Society. This is the second time in the history of the medical society that a woman has been elected as president.

Dr. del Rosario was born in the Philippines and received her medical degree from the University of Santos Thomas School of Medicine in that country. Her undergraduate training was completed in Manilia. She completed an internship at the Lutheran Medical Center in Brooklyn, New York, and completed residencies in obstetrics and gynecology at Francis Scott Key Medical Center in Baltimore and Lawrence Memorial Hospital in Connecticut. Dr. del Rosario is active in many professional and civic associations.



A. LEE DELLON, M.D. was president of the American Society for the Peripheral Nerve for 1992. He is an associate professor of plastic surgery with a joint appointment in neurological surgery at the Johns Hopkins Hospital. After receiving his bachelor's degree from the Johns Hopkins University, Dr. Dellon received his medical degree from the Johns Hopkins University School of Medicine. He completed his internship and assistant residency in general surgery at the Columbia-Presbyterian Hospital and his plastic surgery of general surgery residency at the Johns Hopkins Hospital.

Dr. Dellon is also currently an associate professor of neurological surgery at Johns Hopkins Hospital, an attending hand surgeon and attending plastic surgeon at Union Memorial Hospital, and an attending plastic surgeon at Children's Hospital. He is a member of numerous societies, including the Baltimore City Medical Society, and a prolific writer who has authored numerous journal articles.



ALBERT FOLGUERAS, M.D. was elected president of the St. Agnes Hospital Medical Staff. Dr. Folgueras received his medical degree from the University of Madrid Medical School, Madrid, Spain. He served his internship in general surgery at St. Agnes Hospital and in orthopaedic surgery at the University of Maryland Hospital. Dr. Folgueras is a member of the attending staff at both St. Agnes Hospital and James Lawrence Kernan Hospital. He is a fellow of both the American Academy of Orthopaedic Surgeons and the Interamerican College of Physicians and Surgeons. — Other officers elected to serve on the medical staff in 1993 are Adolfo M. Alonso, M.D. as president-elect and Ethan J. Spiegler, M.D. as secretary/treasurer.



C. EARL HILL, M.D. was elected vice president of the American Academy of Family Physicians (AAFP). Dr. Hill is a family physician and associate professor in the family medicine department at the University of Maryland at Baltimore. He received his medical degree from the University of Maryland School of Medicine and completed his internship at St. Agnes Hospital. Dr. Hill has served in numerous capacities, on both the state and national level, for the Academy of Family Physicians. He is also a member of the American Medical Association, the Anne Arundel County Medical Society, and the Accreditation Council on Graduate Medical Education. Dr. Hill has published several times. He resides in Baltimore with his wife, Enola, and has four children, Karen, Vincent, Patrick, and Steven. ■

EASTERN SHORE, MARYLAND:

New hospital opening late Spring of 1993 on Maryland's Eastern Shore, serving a dynamic community on the Atlantic Ocean. We have opportunity for BC/BP, residency trained physicians in Emergency Medicine. Excellent salary and benefit package. Qualified candidates send C.V. to James A. D'Orta, M.D., 199 Lionhead Court, Baltimore, MD 21237. Fax or Tel: (410) 686-2124.

DIRECTORSHIP OF NEW HOSPITAL EMERGENCY DEPARTMENT:

The Atlantic General Hospital, serving the community on Maryland's Eastern Shore, will open its doors in May of '93. Professional Emergency Physicians is seeking BC/BP physician, residency trained in Emergency Medicine, for Director of new hospital Emergency Department starting in the Spring of 1993. Excellent salary and benefits with partnership in our emergency medicine physician owned corporation. Send C.V. to Search Committee, James A. D'Orta, M.D., 199 Lionhead Court, Baltimore, MD 21237, Fax or Tel: (410) 686-2124.

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Large family practice with offices in Montgomery and Carroll Counties, Maryland has an opening for a full time physician specializing in Family Practice.

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WELCOME!

The Medical and Chirurgical Faculty of Maryland welcomes the new members listed below. They join an organization with a 194-year history of dedicated service to improving the health and welfare of the people of Maryland. With the help and expertise of longtime members and the participation and input of new members, Med Chi can continue its proud tradition of ensuring quality health care.

BALTIMORE CITY

Berman, Brian
419 Redwood Street
Suite 470
Baltimore, MD 21201
(410) 328-5063
FP; BC 018; SS 060

Brooks, Rodney W.
5601 Loch Raven Blvd.
3rd Floor
Baltimore, MD 21239
(410) 323-6226
CD,IM; BC 020; SS 264

Chernow, Bart
Sinai Hospital of Baltimore
2401 Belvedere Avenue
Baltimore, MD 21215
(410) 578-5641
IM,END; BC 020,202; SS 916,276,960,312

Ferguson, Robert P.
Union Memorial Hospital
Dept. of Medicine
201 E. University Pkwy.
Baltimore, MD 21218
(410) 554-2284
IM,GER; BC 020, 213; SS 312,390

Goffman, Thomas E.
St. Agnes Hospital
Dept. of Radiation Oncology
900 Caton Avenue
Baltimore, MD 21229
(410) 368-2910
IM,RO; BC 020, 804; SS 675

Lazar, J. Brett
1101 Edison Hwy.
Baltimore, MD 21213
(410) 732-8800
GPM; BC 070

Mead, Michelle
St. Agnes Hospital
Emergency Dept.
900 Caton Avenue
Baltimore, MD 21239
(410) 368-2000
EM; SS 285

Smith, Julian P.
419 W. Redwood Street
Baltimore, MD 21201
(410) 328-6640
GO,OBG; BC 301,030; SS 396,927

Talbott, John A.
University of Maryland
Dept. of Psychiatry
645 W. Redwood Street
Baltimore, MD 21201
(410) 328-6735
P; BC 075

BALTIMORE COUNTY

Aybar, Raphael R.
5401 Old Court Road
Randallstown, MD 21133
(410) 521-2200
AN; SS 636,881

Bedrick, Alan D.
9000 Franklin Sq. Dr.
Baltimore, MD 21237
(410) 682-7748
PD; BC 055, 554; SS 132

Cohen, Richard L.
1 Cornelius Court
Baltimore, MD 21208
(410) 602-1145
NS; SS 024

Colfer, Joan M.
Baltimore County Health Dept.
1 Investment Place
Towson, MD 21204
(410) 887-2717
GPM,PH; BC 070,704; SS 318

Geduld, David A.
St. Joseph Hospital
Dept. of Anesthesiology
7620 York Road
Towson, MD 21204
(410) 337-1000
AN

Huslig, Richard L.
7505 Osler Drive
Suite 504
Towson, MD 21204
(410) 494-9099
IM, ONC; BC 020; SS 312

London, Philip
6658B Sanzo Road
Baltimore, MD 21209
(410) 484-4705
ORS; BC 040; SS 120,336

Miller, Susan L.
5601 N. Charles Street
Baltimore, MD 21204
(410) 828-2525
IM; BC 020; SS 312

Savader, Barbara L.
6800 Loch Raven Blvd.
Baltimore, MD 21286
(410) 321-1151
R; BC 080; SS 912,564

Wang, Henry
Interventional Radiology
6701 N. Charles Street
Baltimore, MD 21204
(410) 828-2311
DR; BC 080; SS 324

CARROLL COUNTY

Peiffer, John T.
Carroll Imaging Assoc.
208 Washington Heights Medical Center
Westminster, MD 21157
(410) 857-4770
R; BC 080; SS 324

CECIL COUNTY

Ley, James S.
118 North Street
Elkton, MD 21921
(410) 392-6352
ID; SS 312

CHARLES COUNTY

Sewchand, Joel
Medical Arts Center
Highway 5, Box 437
Suite 103
Waldorf, MD 20601
(301) 870-4415
IM; BC 020; SS 312,384

GARRETT COUNTY

Adams, Jerry P.
311 N. Fourth Street
Oakland, MD 21550
(301) 334-8171
FP; BC 018

HOWARD COUNTY

Donohue, Margaret R.
4013 Arjay Circle
Ellicott City, MD 21042
(410) 750-8741
IM; BC 020; SS 252,312

Drosnes, Dean L.
11055 Little Patuxent Pkwy.
Suite 105
Columbia, MD 21044
(301) 964-8283
OTO; BC 045; SS 125

FREDERICK COUNTY

Rifkin, Michael H.
915 Toll House Avenue
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Frederick, MD 21701-5901
(301) 662-7822
GE; SS 288,384,654

MONTGOMERY COUNTY

Ballard, Betsy
8218 Wisconsin Avenue
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Bethesda, MD 20814
(301) 718-2928
GS; BC 085

Baruch, Susan G.
4743 Bradley Blvd.
Chevy Chase, MD 20815
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IM; BC 020

Berger, Jayson M.
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Suite 100
Rockville, MD 20850
(301) 309-8200
P; SS 516

Curtis, Ava Joubert
8720 Georgia Avenue
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Silver Spring, MD 20910
(301) 588-0202
IM,AI; SS 654,252

Foster, James J.
5530 Wisconsin Ave.
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Chevy Chase, MD 20815
(301) 654-4850
GER,IM; BC 213,020; SS 312

Friedlaender, Robert P.
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OPH; BC 035; SS 115

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Rockville, MD 20805
(301) 424-6231
IM; BC 020; SS 312

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11400 Rockville Pike
Rockville, MD 20852
(301) 881-5888
OPH; BC 050; SS 115

Josephs, Shelby H.
6410 Rockledge Dr.
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Bethesda, MD 20817
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AI; BC 055,003; SS 036,252

Knight, Clement B.
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HEM,ONC

Mertz, Persila H.V.
711 Wayne Avenue
Silver Spring, MD 20910
(301) 589-2211
OPH; SS115

Posorske, Lynette H.
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Silver Spring, MD 20910
(301) 588-2525
IM,ID; BC 020; SS 312

Prasad, Sanjay
9801 Greenbelt Road
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Lanham, MD 20706
(301) 552-4484
OTO; BC 045; SS 125

Roth, Katherine G.
10215 Fernwood Road
Suite 301
Bethesda, MD 20817-1106
(301) 897-3355
N; SS 084

Simmonds, Albert C.
19221 Montgomery Village Avenue
Suite C-10
Gaithersburg, MD 20879
(301) 948-3600
OBG; SS 300

PRINCE GEORGE'S COUNTY

Dalal, Samir A.
4520 King Street
Suite 208
Alexandria, VA 22302
(703) 820-6418
AN

Goldstein, Gerald
Greater Laurel Beltsville Hospital
7100 Contee Road
Laurel, MD 20707
(301) 497-7940
AN; BC 005

Harper, Michael G.
7500 Hanover Pkwy.
Greenbelt, MD 20707
(301) 982-7944
N; BC 025

Schlosberg, Marc F.
7500 Hanover Pkwy., #1120
Rockville, MD 20852
(301) 982-7944
N

Sibay, Hassan
4520 King Street
Suite 208
Alexandria, VA 22302
(703) 820-6418
AN

WICOMICO COUNTY

Hamilton, Scott A.
P.R.M.C.
100 E. Carroll Street
Salisbury, MD 21801
(410) 543-7471
PD; SS 132

Libby, Peter A.
918 Eastern Shore Dr.
Salisbury, MD 21801
(410) 749-1124
R; BC 080; SS 324,912

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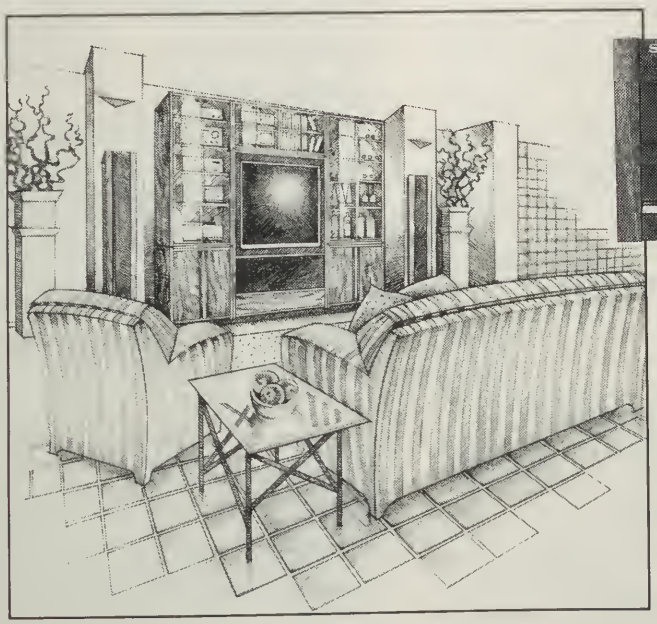
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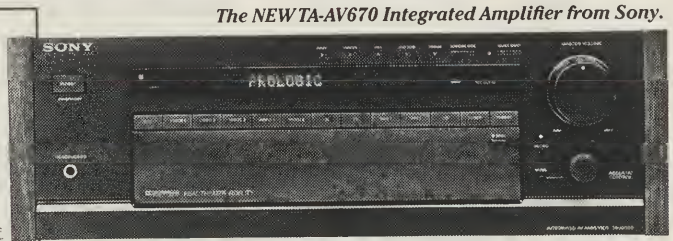
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DIRECTORY CHANGES

The Med Chi membership directory is published anually. It lists, by county, the addresses, phone numbers, specialties, board certifications, and specialty society affiliations of all Med Chi members. This update provides the most recent changes.

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Auxiliary

Mammography, your best weapon

Throughout 1991 and 1992, the auxiliary has focused on the need for early detection of breast cancer. Mammography, self-examination, education, and research have all been part of this program. As a grand finale for these public relations activities, a billboard campaign was launched for October 1992—Breast Cancer Awareness Month. "One in Nine" billboards were made available through the Southern Medical Association Auxiliary, in conjunction with its own program on breast cancer. "Mammography, Your Best Weapon" is graphically portrayed on billboards all over Maryland.

The first two were sponsored by Med Chi and, in September, were placed on both sides of Route 50 on the way to Ocean City. Those who attended Med Chi's semiannual meeting at the shore saw these special billboards, which were placed near the road in well-traveled areas. Interestingly, Med Chi's admonition about the dangers of cancer was juxtaposed with a cigarette advertisement complete with the surgeon general's warning.

Washington County Auxiliary, sponsored by Y-ME of Cumberland Valley (a breast cancer support group), had the first billboard for October. Baltimore City Auxiliary placed three billboards in strategic locations, with President Adriana Zarbin giving strong support. Harford County, under the guidance of Ching Barretto, State Health Projects co-chairperson, has a billboard prominently displayed. Georgia Lizas of Frederick County Auxiliary and president-elect of the state auxiliary made the billboard one of her priorities. Howard County boasts three sites—two sponsored by the Breast Health Center of Howard County General Hospital and Auxiliary. In Prince George's County, Dr. and Mrs. John Lynn spurred the purchase of two billboards. Dr. and Mrs. Joseph Snyder of Montgomery County supported the project for their county. Other county auxiliaries are considering billboards for the month of March in honor of Doctor's Day on the 30th.

The project has been received with outstanding enthusiasm. Our thanks go to Med Chi, the county auxiliaries and medical societies, and the Southern Medical Association Auxiliary. This message should go to all wives, sisters, and daughters, as well as to husbands, fathers, brothers, and sons who care. (See photo on next page.)

MILDRED TAYLOR
State Health Projects co-chairperson ■



Figure 1. The Med Chi–sponsored billboard on Route 50 is juxtaposed with a cigarette advertisement including the surgeon general's warning about cancer.



Figure 2. L to R—Mildred Taylor, Madrian Snyder, Betty Molz, Vivian Lynn, Denise Cann, and Myrna Goodman hold a mock-up of the "One in Nine" billboard.

Congratulations and good wishes to Mildred Taylor, president-elect of the Southern Medical Association Auxiliary, soon to be president.

MARYLAND

The Auxiliary always welcomes new members.

Auxiliary members support the physicians and are recognized for their contributions to health, education, and the promotion of quality health care in Maryland.

For information on becoming a member, call JoAnn Troisi at Med Chi's Auxiliary office.
539-0872 (Baltimore area) 1-800-492-1056 (toll free in MD)

The Maryland Medical Journal (MMJ) *is a monthly publication of the Medical and Chirurgical Faculty of Maryland. The journal's goals are educational and informative: the publishing of scientific articles (original research, case studies, and review articles) and other technical information, as well as editorials, letters, special articles (evaluations, position papers, reviews of nonscientific subjects), membership and legislative news, continuing medical education notices, and programs and policies of the faculty.*

Information for AUTHORS

- ***Letter of transmittal***—The letter of transmittal, which all authors must sign, should include the full names, degrees, titles, and affiliations of all authors, and the name, address, and phone number of the author to whom reprint requests and correspondence should be sent.

  The letter should include a statement to the effect that all authors have participated in the conception and design of the work and in the writing of the manuscript, and that they take public responsibility for it. The authors should attest to the validity and legitimacy of the data, and acknowledge that they have reviewed the final version of the manuscript and approve it for publication.

  In addition, the letter must include a paragraph that transfers copyright ownership to the *MMJ* in the event that the work is published.

- ***Manuscript preparation***—Manuscripts should be submitted to Editor, *MMJ*, 1211 Cathedral Street, Baltimore, MD 21201-5585. Manuscripts must be original material not previously published and not under consideration by another publication. An abstract of 100 to 300 words is required.

  All material, including references, tables, and legends, must be double-spaced. Pages should be numbered. (All abbreviations should be spelled out on first use.) The original manuscript plus one copy should be submitted on standard (8.5" x 11") bond paper. If at all possible, an IBM-compatible disk should be included, with the manuscript entered in a WordPerfect, Multimate, Wordstar, or ASCII format; the transmittal letter should identify the format used.

- ***References***—References are limited to those citations noted in the text. References should be numbered consecutively as they appear in the text and should be kept to a minimum (fewer than thirty-five). Personal communications and unpublished data are not acceptable. At a minimum, references should include names of all authors, complete title of the article cited, name of journal abbreviated according to *Index Medicus* (if abbreviation is not known, journal name should be spelled out fully), year of publication, volume number, and first and last page numbers. Sample references are as follows:

  1. Stevens MB. The clinical spectrum of SLE. Md Med J 1991; 10:875–85.
  2. Ropes MW. Characteristics, manifestations, and pathologic findings. In: Ropes MD, ed. Systemic Lupus Erythematosus. Cambridge, MA: Harvard University Press. 1976; 50–4.

- ***Tables***—Tables should be typed on separate sheets of paper, be numbered, and have a brief descriptive title. Data presented in tables should be self-explanatory and should supplement, not duplicate, the text; the Editor reserves the right to edit tables. Authors should be sure that statistics are consistent in both tables and text.

- ***Illustrations***—Illustrations include material that cannot be set in type. Photographic material must be submitted as high-contrast, glossy prints. Drawings and graphs must be done professionally in india ink on high-grade white drawing paper or be computer generated. Identification—including figure number, the title of manuscript, the name of corresponding author, and arrow indicating top—should be typed on a gummed label and affixed to the back of each illustration. Legends for illustrations should be typed on a separate page with numbers corresponding to those on the photographs or drawings. Recognizable photographs of patients are to be masked and should carry with them written permission for publication. Cost of printing color photographs must be borne by the author.

Checklist

- ☐ Original manuscript and one copy.
- ☐ IBM-compatable disk in WordPerfect, Multimate, Wordstar, or ASCII.
- ☐ Everything double-spaced.
- ☐ Letter of transmittal, signed by all authors, that includes release of copyright, statement of authorship responsibility, title and affiliation of all authors, and identification and phone number of corresponding author.
- ☐ Abstract of 100 to 300 words.
- ☐ Permission-to-borrow letters for any previously published illustrations or tables

- ***Permissions***—Material taken from other sources must be accompanied by written permission from both author(s) and publisher allowing the *MMJ* to reproduce the information/figure.

- ***Editorial responsibility***—All manuscripts are acknowledged upon receipt. They are subject to peer review by an editorial board and, at times, by guest reviewers in appropriate fields of medicine, to determine the originality, validity, and importance of the content and conclusions. Authors are usually notified of the status of their papers (acceptance, revision, or rejection) within 4 to 8 weeks of receipt; however, longer delays are sometimes unavoidable. Reviewers' comments will be returned with rejected manuscripts at the discretion of the Editor. All guest reviewers will remain anonymous.

  Accepted manuscripts become the permanent property of the *MMJ* and are subject to copy editing. (The *Chicago Manual of Style* and the unabridged *Random House Dictionary of the English Language* are used as style guides.) The corresponding author is sent a reprint order form and galley proofs. S(he) then has 48 hours in which to make minor changes and clear all corrections and changes with co-authors; if proofs are not returned by the specified date, they will be considered approved as typeset. ■

Miscellaneous meetings

Maryland Academy of Family Physicians first semiannual meeting, at Hyatt Regency Inner Harbor Hotel, Baltimore, MD. 10 Cat 1 AMA/PRA credits; 10 AAFP prescribed hours. Fee: $100 MAFP members; $150 nonmembers; $60 paramedicals; No charge for residents, medical students, and MAFP life and retired members. Info: William P. Jones, M.D., 410-747-1980. — **Jan. 30–31**

Future relationship between community and university hospitals, sponsored by the Baltimore City Medical Society, at the Union Memorial Hospital, Baltimore, MD. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. — **Feb. 4**

The cost of medicine in the future, sponsored by the Baltimore City Medical Society, at the University of Maryland Westminster Hall. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. — **Mar. 4**

Clinical dilemmas in pulmonary practice, sponsored by the American Lung Association of Maryland and the Maryland Thoracic Society. 7 Cat 1 AMA/PRA credits. Info: Anne Eder, 410-560-2120 or toll free in MD, 800-492-7527. — **Mar. 7**

Headache in the decade of the brain symposium, presented by the Comprehensive Headache Center at the Germantown Hospital and Medical Center in Philadelphia, PA. 6 Cat 1 AMA/PRA credits. Info: 215-951-8926. — **Mar. 27**

Laboratory workshop in breast reconstruction, at the Sentara Norfolk General Hospital, Norfolk, VA. Info: 804-446-6140. — **Mar. 25–27**

Hands-on workshop on advanced diagnostic methods in andrology, at the Jones Institute of Reproductive Medicine, Norfolk, VA. Info: 804-446-6140. — **Apr. 8–9**

Thrombolysis: Its role in peripheral, arterial and venous disorders, at the Omni International Hotel, Norfolk, VA. Info: 804-446-6140. — **Apr. 23**

195th annual meeting of the Medical and Chirurgical Faculty of Maryland, at the University of Maryland Center of Adult Education, College Park, MD. Info: Betsy Newman, 410-539-0872 or 1-800-492-1056. — **Apr. 30–May 2**

Practical aspects of forensic medicine, sponsored by the Baltimore City Medical Society, at the Montebello Rehabilitation Hospital, Baltimore, MD. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. — **May 6**

Practical dermatology for the primary care physician —19th edition, at the Ritz-Carlton Hotel, Pentagon City, VA. Info: 804-446-6140. — **May 6–9**

Virginia Society of Otolaryngology-HNS annual meeting, at the Tides Inn Resort, Irvington, Virginia. Info: Donna Scott, 804-353-2721. — **May 7–8**

Clinical auscultation of the heart, sponsored by the American College of Cardiology, at the Georgetown University Medical Center, Washington, DC. 18 Cat 1 AMA/PRA credits. Info: 800-257-4739. — **May 12–14**

Central Atlantic Seminar in Anesthesiology, sponsored by the George Washington University Medical Center, in Washington, DC. Info: John F. Vargo, 202-994-4285. — **May 13–16**

Maryland Academy of Family Physicians 45th annual meeting and scientific session, at the Princess Royale Oceanfront Hotel and Conference Center, Ocean City, MD. 41.25 Cat 1 AMA/PRA credits; 41.25 AAFP prescribed hours. Fee: $240 members; $275 nonmembers; 135 paramedicals; No charge for residents, medical students, MAFP retired and life members. Info: Francis C. Bruno, M.D., 410-747-1980. — **May 18–23**

6th annual trauma anesthesia and critical care symposium, sponsored by the International Trauma Anesthesia and Critical Care Society (ITACCS) and Multinational Academic Consortium, at the Hyatt Regency, Baltimore, MD. Info: Kimberly C.A. Unitas, 410-328-2399. — **May 2–22**

Virginia Society of Ophthalmology annual meeting, at the Norfolk Marriott Waterside, Norfolk, VA. Info: Donna Scott, 804-353-2721. **May 21–22**

Ethics of death and dying in the young person, sponsored by the Baltimore City Medical Society. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. **June 3**

9th annual Eastern Virginia Medical School family medicine review course, at the Cavalier Hotel, Virginia Beach, VA. Info: 804-446-6140. **June 6–11**

Board review in family practice, sponsored by the George Washington University Medical Center, in Arlington, VA. Info: John F. Vargo, 202-994-4285. **June 12–16**

INMEDs fourth annual millennium conference, sponsored by the International Medical Services for Health (INMED) and the Tulane University School of Public Health and Tropical Medicine, Sheraton City Centre Hotel, Washington, DC. Info: 703-444-4477. **June 15–18**

11th summer symposium in internal medicine, sponsored by the Eastern Virginia Medical School,at the Fort Magruder Inn & Conference Center, Williamsburg, VA. Info: 804-446-6140. **June 25–27**

16th annual flap dissection workshop, sponsored by the Eastern Virginia Medical School, at the Virginia Beach Conference Center. Info: 804-446-6140. **July–10**

14th international congress of lymphology, sponsored by the International Society of Lymphology (ISL). Part 1: "Frontiers in Lymphology" at the Hyatt Regency, Baltimore, MD. Part 2: "Lymphology in 1993" at the Ramada Renaissance Techworld, Washington, DC. Info: Grace Wagner, Program Coordinator, 602-626-6118. **Sept. 20–26**

Causes of the medical malpractice crisis, sponsored by the Baltimore City Medical Society. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. **Oct. 7**

Continuously throughout the year

Fluorescein angiography conference, sponsored by the Retina Center, St. Joseph Hospital, Baltimore, MD, first and third Mondays of each month; 8:00–9:00 a.m. Fee: none. Info: R. Classon, 410-337-4500.

PHYSICIAN'S RECOGNITION AWARD

During November 1992, the physicians listed below received the American Medical Association's (AMA's) Physician's Recognition Award. Established in 1968, the award's purpose is to encourage physician participation in continuing medical education and to recognize those physicians who have voluntarily completed programs of continuing medical education.

Azam Baig
Bruce Stephen Bloom
Barney McCoy Davis
Kamalinee V. Deshpande
Michael James LaPenta
Maria Ruehsen-De Moraes
Frank Michael Ryan
David Satinsky
Charles Jay Stahl
Mark Gary Wolfman

The Johns Hopkins Medical Institutions

All courses at the Thomas B. Turner Building unless otherwise indicated. For information on continuing medical education activities, contact the Office of Continuing Education, 720 Rutland Ave., Baltimore, MD 21205 (410-955-2959).

Endoscopic sinus surgery. 19 Cat 1 AMA/PRA credits for lab and lectures; 14.5 Cat 1 AMA/PRA credits for lecture only. Fee: $1,250 for laboratory and lectures; $295 for lecture series only. — **Jan. 7–8**

Advanced endoscopic sinus surgery. 9 Cat 1 AMA/PRA credits. Fee: $1,050. — **Jan. 9**

1993 update in the management of age-related macular degeneration. 6.5 Cat 1 AMA/PRA credits for one-day course; 8.5 Cat 1 AMA/PRA credits for two-day course. Fee: $200 physicians; $100 residents, fellows, and allied health professionals; $350 lectures and optional lab course. — **Jan. 22–23**

Americans with disabilities act of 1992 and you. Info: Dr. Jacqueline K. Corn, 410-955-2609 — **Jan. 29–30**

PET and SPECT brain imaging in clinical practice and research. 18 Cat 1 AMA/PRA credits. Fee: $495 physicians; $395 residents, fellows, and allied health professionals. Info: Patty Campbell, 410-955-6046 or Julia Buchanan, 410-955-8582. — **Mar. 10–12**

Spectrum of developmental disabilities XV: PL 94-142; PL 99-457 — Issues of concern. 20 Cat 1 AMA/PRA credits. Fee: $425. — **Mar. 15–17**

Biological response to orthopaedic implants, at the Marriott Inner Harbor Hotel, Baltimore, MD. Cat 1 AMA/PRA credits available. Fee: $200 physicians; $125 residents and fellows. — **Mar. 19–20**

Problems in the diagnosis and management of the dysphagic patient: Transatlantic perspectives, at the Stouffer Harborplace Hotel, Baltimore, MD. Cat 1 AMA/PRA credits available. Fee: $425 physicians; $245 residents and allied health professionals. — **Mar. 29–30**

Diagnosis and treatment of neoplastic disorders, medical surgical, and radiotherapeutic aspects. 14.5 Cat 1 AMA/PRA credits available. Fee: $275; $300 postmarked after February 1, 1993; $125 physician-in-training. — **Apr. 1–2**

Current concepts in thyroid disease: Update 1993. Cat 1 AMA/PRA credits available. Fee: $150 physicians; $40 residents and fellows. — **Apr. 16**

20th annual pediatric trends. 45 Cat 1 AMA/PRA credits. Fee: $625 physicians; $375 residents and fellows. — **Apr. 19–24**

34th annual postgraduate institute for pathologists in clinical cytopathology. Course A: Home study, March-April 1993. Course B: Lecture series with laboratory studies. 140 Cat 1 AMA/PRA credits. — **Apr. 19–30**

Quality improvement and the hospital library

On Thursday April 8, 1993

The Maryland Association of Health Sciences Librarians (MAHSL) will offer a continuing education course entitled "Continuous Quality Improvement and the Hospital Library."

The course will be conducted by Chris Jones, a member of the Information Management Task Force of the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). Cost is $50 for MAHSL members and $75 for non-MAHSL members. Enrollment is on a first-come, first-served basis.

The course is scheduled to be held at the Medical and Chirurgical Faculty building from 8 am to 5 pm. To join MAHSL or to register for the course, call Myra Binau at Washington County Hospital (410-790-8801). For more information, call Kathy Curry at 410-532-3891.

Clinical care of the patient with HIV infection, at the Stouffer Harborplace Hotel, Baltimore, MD. 13 Cat 1 AMA/PRA credits; 12.75 AAFP credits. Fee: $325 physicians; $165 residents, fellows and allied health professionals. **Apr. 22–23**

Principles and practice of clinical MRI, at the Stouffer Harborplace Hotel, Baltimore, MD. Cat 1 AMA/PRA credits available. **Apr. 22–25**

XII international papillomavirus workshop, at the Hyatt Regency Hotel, Baltimore, MD. 30 Cat 1 AMA/PRA credits. Fee: $400 prior to June 30, 1993; $450 after June 30, 1993. Info: Gretchen Shelton, 410-931-8108. **Apr. 22–25**

Pediatric allergy and immunology for the practitioner. Cat 1 AMA/PRA credits available. **May 6–7**

6th summer institute in environmental health studies. Info: Dr. Jacqueline Corn or Linda Lamb, 410-955-2609. **June 7–18**

Continuously throughout the year

Visiting preceptorship in pediatric critical care medicine. Ongoing five-day preceptorship by appointment. 40 Cat 1 AMA/PRA credits. Fee: $600.

The department of radiology and radiological sciences offers several courses in abdominal and obstetrical ultrasound. Info: P. Williams, 410-955-3169.

Visiting physicians. Offered throughout the year for experience in the lab and participation in read-in sessions; by appointment only. 40 Cat 1 AMA/PRA credits. Fee: $500.

Johns Hopkins medical grand rounds. Accredited audiovisual continuing education series of case discussions for clinicians; thirty topics per year in five bimonthly programs. Individual and group subscriptions. 40 Cat 1 AMA/PRA credits. Info: 410-955-3988.

Statement of ownership, management, and circulation

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Total: 7,650; average: 7,819

University of Maryland

For each course, additional information may be obtained by contacting the Program of Continuing Education, University of Maryland School of Medicine, Room 14-011, BRB, 655 W. Baltimore St., Baltimore, MD 21201 (410-328-3956) or by calling the phone number listed after a specific program. FAX 410-328-3103.

Advanced trauma life support, sponsored by the Maryland Institute for Emergency Medical Services Systems, in Baltimore, MD. Info: Office of International Development, 410-328-2399. **Mar. 1–11**

Managed care and quality improvement: Making a difference, sponsored by the Maryland Institute for Emergency Medical Services Systems, in Baltimore, MD. Info: Office of International Development, 410-328-2399. **Mar. 11**

Alcohol and trauma care, sponsored by the Maryland Institute for Emergency Medical Services Systems, in Baltimore, MD. Info: Office of International Development, 410-328-2399. **Mar. 11**

R. Adams Cowley 15th national trauma symposium, sponsored by the Maryland Institute for Emergency Medical Services Systems, at the Hyatt Regency Baltimore, in Baltimore, MD. Info: Office of International Development, 410-328-2399. **Mar. 12–14**

Infectious diseases in everyday medicine—3rd annual symposium, at the Baltimore Convention Center, Baltimore, MD. 12.75 Cat 1 AMA/PRA credits. Fee: $175 physicians before 4/1/93, $200 after 4/1/93; $100 allied health professionals before 4/1/93, $125 after 4/1/93; $50 fellows, residents and students before 4/1/93, $75 after 4/1/93. Info: Eunice Katz, 410-706-7560. **Apr. 1–20**

Continuously throughout the year

Visiting professor program. A directory of speakers and their topics is available to area hospitals and other health care organizations. NO administrative fees are charged for this service. Info: 410-328-3956.

Visiting fellowship in interventional radiology. Five-day practicum for radiologists, including conferences, patient rounds, and laboratory observations. By appointment only. 40 Cat 1 AMA/PRA credit. Fee: $1,200.

Ultrasound: Preceptorships. For physicians or sonographers with six-months' experience in practicing ultrasound. By appointment only. 40 Cat 1 AMA/PRA credit. $500.

Departmental rounds and conferences. Weekly, hands-on, and lecture presentations hosted by the university's clinical departments. Hour-for-hour Cat 1 AMA/PRA credits available. Brochure available.

Pediatric grand rounds. Every Thursday from September to June, except third Thursday, in the R. Adams Cowley Shock Trauma Auditorium. Info: Bonnie Winters, 410-328-6777.

Performing Arts Medicine II: Focus on Young Performers

A conference presented by the Committee on Medicine and the Performing Arts of the Medical and Chirurgical Faculty of Maryland

The second annual conference on performing arts medicine will advance the knowledge of health care professionals, performers, and educators regarding health problems faced by musicians, vocalists, and dancers. The program will emphasize care of student performers. The conference will consist of thirteen presentations and a short recital. The lectures will include audio-visual aids and, in several cases, performer demonstrations.

March 20-21, 1993
Med Chi Faculty Building
1211 Cathedral St.
Baltimore, MD

This conference is designed to educate physicians, both specialists and primary care practitioners, about the health and training problems faced by student performers during their secondary, college, and graduate training. They will learn to recognize problems of artists, some of which are unique to performers or have special occupational consequences. Various means of diagnosis, treatment, and rehabilitation will be presented. Special attention will be given to protecting young performers and preventing disabilities, by working in partnership with teachers and students.

Registration Form

Performing Arts Medicine II: Focus on Young Performers
March 20-21, 1993

Med Chi member physicians $50; nonmember physicians $75; allied health professionals $35; performers, music educators, students, residents $15. Tuition assistance available.

Return registration form and payment to
Susan E. Harman
Music Medicine Clearinghouse
Med Chi, 1211 Cathedral St.
Baltimore, MD 21201-5585

Optional attendance at the Baltimore Symphony Orchestra concert on Sunday, March 21 at 3 p.m. is an additional $15. The program will consist of works by Grieg, Richard Strauss, and Tchaikovsky, conducted by Eri Klas. To purchase BSO tickets, you must register by February 26.

For additional information, contact Susan E. Harman at 410-539-0872 (within the Baltimore metro area) or at 1-800-492-1056 (elsewhere in MD). The fax number is 410-727-5967.

☐ Med Chi member ($50) ☐ Nonmember physician ($75)

☐ Allied health professional ($35)

☐ Performer, music educator, students, residents ($15)

☐ BSO concert ($15) Total $ _____

Form of payment

☐ check (payable to "Med Chi") ☐ Visa ☐ Mastercard

Credit Card# _____ Exp. Date _____

Signature _____

Please print

Name _____

Address _____

City _____

State _____ Zip _____

Phone (___) _____

Component Society _____

Maryland license # _____

Program

Saturday, March 20

8:00-8:30	*Registration and Coffee*	
8:30-9:00	Opening Remarks	Jose Yosuico, M.D. George Udvarhelyi, M.D.
9:00-9:45	The Impact of Drug Abuse on the Performing Arts	Harold Crossley, D.D.S., Ph.D.
9:45-10:30	Eating Disorders Among Performers: Prevention, Recognition and Treatment	Beth Williams, Ph.D.
10:30-10:45	*Coffee Break*	
10:45-11:30	The Americans with Disabilities Act: Impact and Implementation for Physicians	Randi Kopf, R.N., M.S., J.D.
11:30-12:15	Stress Management for Music Students	David Sternbach, A.C.S.W.
12:15-1:15	*Lunch*	
1:15-2:00	Harp Recital	Sonja Inglefield
2:00-2:45	Prescription Drugs and their Effect on Performance	Andrew C. Goldstone, M.D.
2:45-3:30	Health Concerns of Marching Musicians (includes demo)	Susan Harman, M.S.L.S., M.Ed.
3:30-3:45	*Coffee Break*	
3:45-4:30	Potential Effects of Diabetes Mellitus on Performing Artists	Richard Rubin, Ph.D.
4:30-5:15	Skin Diseases Among Musicians	Jeff Harvell, M.D.

Sunday, March 21

8:30-9:00	*Registration and Coffee*	
9:00-9:45	Focal Dystonia: Clinical Manifestations and Rational Approach to Treatment	Gregory Degnan, M.D. Emily Jeter, O.T.R.
9:45-10:30	Vocal Dysphonia – Focal Dystonia: A Myofascial Masquerade	Lawrence Funt, D.D.S.
10:30-10:45	*Coffee Break*	
10:45-11:30	The Alexander Technique: What it can Contribute to Performance Health (includes demo)	Barbara Lachman, M.A.
11:30-12:15	The Feldenkrais Method: What it can Contribute to Performance Health (includes demo)	Aliza Stewart
12:15-1:00	Conditioning and Physical Fitness for Performers	David Kreisberg, M.D.
1:00-1:15	Conference Summation and Questions	
3:00	Optional BSO concert	

The Faculty is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor continuing medical education for physicians.

The Medical and Chirurgical Faculty of Maryland designates this continuing medical education activity for up to 10 credit hours in Category 1 of the Physician's Recognition Award of the American Medical Association.

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Community Health Surveillance & Laboratories Admin.

Ebenezer Israel, MD, MPH- Director
Epidemiology & Disease Control Program

EPIDEMIOLOGY & DISEASE CONTROL PROGRAM
201 W. Preston Street, Baltimore, Maryland 21201 (410)225-6700

January, 1993

CHLAMYDIA: Diagnosis and Treatment Guidelines

Infection caused by *Chlamydia trachomatis* is the most prevalent sexually transmitted disease in the United States. It is estimated that there are approximately 4 million new cases annually. Annual costs for the disease exceed $2.4 billion.

As laboratory techniques improve, chlamydial organisms are increasingly implicated as causes of human disease. Chlamydiae are obligate intracellular bacteria, which differ from viruses and rickettsiae but, like the latter, have been sensitive to broad-spectrum antimicrobials. Chlamydiae are now recognized as important pathogens responsible for an increasingly apparent number of sexually transmitted infections, with eye and lung infections in infants the consequences of genital infections in their mothers.

CHLAMYDIAL INFECTION IN ADULTS

A. Diagnosis

Sexually transmitted genital infections are manifested in males primarily as a urethritis, and in females by mucopurulent cervicitis. Clinical manifestations of urethritis are usually indistinguishable from gonorrhea and include an opaque discharge of moderate or scanty quantity, urethral itching, and burning on urination. Asymptomatic infection occurs in men; infection may be found in 1-10% of sexually active men. Possible complications or sequelae of male urethral infections include epididymitis, infertility, and Reiter's syndrome. In homosexual men, receptive anorectal intercourse may result in chlamydial proctitis.

In the female, the clinical manifestations may be similar to those of gonorrhea, frequently presenting as a mucopurulent endocervical discharge, with edema, erythema and easily induced endocervical bleeding, caused by inflammation of the endocervical columnar epithelium. However, most women with endocervical or urethral infections are asymptomatic. Complications and sequelae are salpingitis with subsequent risk of infertility or ectopic pregnancy. Asymptomatic, chronic infections of the endometrium and fallopian tubes may lead to the same outcome.

Chlamydial infections may be acquired concurrently with gonorrhea and persist after the gonorrhea has been successfully treated. Because gonococcal and chlamydial cervicitis are often difficult to distinguish clinically, treatment for both organisms is recommended when one is suspected.

Culture and nonculture methods for diagnosis of *C. trachomatis* are now available. Appropriate use of these diagnostic tests is strongly encouraged, especially for screening asymptomatic high-risk women in whom infection would otherwise be undetected. However, in clinical settings where testing for chlamydia is not routine or available, treatment often is prescribed on the basis of clini-

cal diagnosis or as co-treatment for gonorrhea. Priority groups for chlamydia testing, if resources are limited, are high-risk pregnant women, adolescents, and women with multiple sexual partners. Results of chlamydial tests should be interpreted with care. The sensitivity of all currently available laboratory tests for *C. trachomatis* tests is substantially less than 100%; thus, false-negative tests are possible. Although the specificity of nonculture tests has improved substantially, false-positive test results may occur with non culture tests.

Definitive Diagnosis (requires 1 or 2)

1. Isolation and confirmed identification of *C. trachomatis* in tissue culture from cervical, rectal, or urethral exudate and identification of characteristic intracellular inclusions.
2. Identification of *C. trachomatis* by one of the following methods and confirmation by a second culture or nonculture test method:
   a. Identification of the organism by direct immunofluorescence antibody (DFA) test of exudate;
   b. Detection of antigen by enzyme immunoassay (EIA) of exudate; and
   c. Detection of nucleic acid from exudate by the DNA probe technique.

Presumptive Diagnosis (requires 1 and 2)

1. Presence or absence of clinical symptoms (e.g., mucopurulent cervicitis, urethritis, epididymitis, pelvic inflammatory disease).
2. Detection of *C. trachomatis* by a nonculture test.

Suggestive (requires 1, <u>and</u> either 2 or 3)

1. Clinical symptoms (e.g., mucopurulent cervicitis, urethritis, epididymitis, pelvic inflammatory disease).
2. Exclusion of other causes of discharge or exudate (e.g., gonorrhea).
3. Sexual exposure to a person infected with *C. trachomatis* or recently diagnosed with nongonococcal urethritis, mucopurulent cervicitis, or pelvic inflammatory disease.

B. Treatment and Follow-up

The CDC recommended treatment regimen for uncomplicated urethral, endocervical, or rectal *C. trachomatis* infections in men and non-pregnant women is:

Doxycycline 100 mg. orally 2 times a day for 7 days; or

Tetracycline 500 mg. orally 4 times a day for 7 days.

In addition, preliminary studies have shown that a one (1) gram dose of azithromycin is effective in the treatment of genital chlamydial infections in persons 16 years of age or over. It is FDA approved for this use. (The cost of a single dose of azithromycin is approximately twice that of other recommended therapies.)

The recommended treatment regimen in **pregnancy** is:

Erythromycin base 500 mg. orally 4 times a day for 7 days

Note: Azithromycin should <u>not</u> *be utilized in pregnant women.*

CDC recommends that all patients treated for gonorrhea be simultaneously treated for chlamydia. (See reference 2 for gonorrhea recommendations.)

C. Counseling/Education (See Chlamydia Fact Sheet for use inpatient education)

Patients should:

1. Understand how to take prescribed oral medications (e.g., with doxycycline prolonged sunlight should be avoided; tetracycline should be taken 1 hour before or 2 hours after meals, dairy products, antacids, iron or other mineral-containing preparations);
2. Return for evaluation if symptoms persist or recur after treatment;
3. Refer sex partner(s) for examination and treatment;
4. Avoid sex until patient and partner(s) have completed therapy and,
5. Use condoms to prevent future infections.

D. Evaluation of Sex Partners

All sex partners of patients who have *C. trachomatis* infection should be examined and promptly treated, even if asymptomatic, with an appropriate regimen for *C. trachomatis* if any sexual exposure took place within the time period 30 days before the onset of symptoms until the treatment date of the infected patient, or 60 days preceding the diagnosis for asymptomatic cases.

E. Special Considerations

Screening: The prevalence of chlamydia is very high among sexually active young women but may also be high among young men. Screening is recommended for all women under 20 years of age who are sexually active, and for all women over 20 years of age with at least two of the following: age 20-24, inconsistent or no use of barrier contraceptives, and either a new sex partner or more than one partner in the past 3 months. Culture or nonculture tests may be used for screening women. Screening is desirable for sexually active men, however, culture is the desirable test since nonculture tests are insensitive in asymptomatic males. The leukocyte esterase test performed on urine specimens as a screening tool for urethritis and the polymerase chain reaction (PCR) for *C. trachomatis* DNA on urogenital specimens are currently under evaluation.

Nonculture tests: Nonculture tests for *C. trachomatis* should not be used if the results have medicolegal (e.g., suspected child abuse) or serious consequences because of the possibility of false-positive results.

Testing for other STDs: All patients with chlamydial infection should have a serologic test for syphilis and should be offered confidential counseling and testing for HIV infection. Patients with chlamydial infection who also have syphilis or who are sex partners of persons in whom syphilis has been diagnosed should be promptly treated with a regimen appropriate to the stage of syphilis. (See reference 2 for syphilis recommendations.)

Infection in pregnancy: Pregnant women should undergo diagnostic testing for chlamydia, gonorrhea, syphilis, hepatitis B virus infection, and be offered HIV counseling and testing at their first prenatal visit. Women at high risk for STDs should also be retested during the third trimester. Chlamydia tests are recommended during the third trimester since complications are associated with the perinatal and puerperal period. Culture or nonculture chlamydia tests may be used to screen pregnant women for infection. Certain antimicrobials are contraindicated in pregnancy because of the possible adverse effects on the fetus.

CHLAMYDIAL INFECTION IN INFANTS

As many as 70% of infants born to women infected with *C. trachomatis* become infected. Many of these infants develop conjunctivitis or pneumonia, but nasopharyngeal colonization with *C. trachomatis* is common whether or not these diseases occur.

All cases of ophthalmia neonatorum should be tested for the presence of *Neisseria gonorrhoeae* and *C. trachomatis.* The diagnosis of chlamydia conjunctivitis can be established by culture or nonculture tests of conjunctival scrapings. In infants, pneumonia caused by *C. trachomatis* occurs 4 to 6 weeks after birth and is characterized by a subacute course, cough, and relative lack of fever. Systemic therapy for both conjunctivitis and pneumonia should be administered because of the nasopharyngeal colonization that commonly occurs. Treatment of chlamydial infections in pregnant women is the best method for preventing neonatal chlamydial disease.

SOURCES:

CDC (1989) Sexually Transmitted Diseases Treatment Guidelines. MMWR 38, S-8.

CDC (1991) Sexually Transmitted Diseases Clinical Practice Guidelines.

Stamm, W. (1991) Azithromycin in the treatment of uncomplicated genital chlamydial infections. Am JMed. 91 (Suppl 3A), 19S-21S.

Benenson, A. (ed) (1990) Control of Communicable Diseases in Man. American Public Health Association, 86-87.

Chlamydia Fact Sheet

Chlamydia is an infection caused by a bacterium

Chlamydia trachomatis is the bacterium (germ) that causes chlamydia.

Chlamydia is spread by sexual contact and from mother to baby

The bacterium is found in infected body fluids from the penis or vagina and spread by direct sexual contact (touching or rubbing). Babies can develop eye and ear infections as well as pneumonia. Sometimes this infection becomes so serious in babies that they may die.

Symptoms to look for:

- Discharge from the penis, vagina or rectum
- Bad cramping or severe pain in the pelvic area (pelvic inflammatory disease or PID)
- Burning or itching around the opening of the penis
- Pain in the testicles
- Pain when urinating

The first symptoms may start 7 to 30 days after contact with an infected person. Many men and women can have chlamydia and spread it without having any symptoms at all. If the infection is not treated, chlamydia can damage reproductive organs, sometimes causing sterility.

Chlamydia can be treated with antibiotics

Since the symptoms of chlamydia and gonorrhea are similar and both diseases can occur at the same time, everyone treated for gonorrhea should also be treated for chlamydia.

Chlamydia is preventable

- Avoid infection by being monogamous, that is, only have sex with one person who only has sex with you
- Avoid unprotected sex -- use condoms
- Know the signs of chlamydia infection

If you think you or your partner(s) has chlamydia or any other STD, see your doctor and don't have sex

If you have chlamydia, tell your partners so that they can be treated

Don't have sex until both you and your partner have finished treatment.

Maryland Department of Health and Mental Hygiene
Epidemiology and Disease Control Program
December, 1991

We Need A Doctor In The House

When the Maryland General Assembly convenes in Annapolis for its 1993 session, the Medical and Chirurgical Faculty will be there. Since 1964, Med Chi has staffed the first aid facility operated during the 90-day legislative session. Come join us at the state capitol building, and see the laws being made first hand. One doctor a day is all that is needed to care for the public, the legislators, and their staffs. Take advantage of the opportunity to donate something priceless, your time.

Please detach the postcard located at the top of this page, fill it out and mail it. A confirmation card will be sent to you explaining the details. You will be carrying on a tradition established by the medical community for the people of Maryland.

Doctor of the Day 1993



Note: All Monday dates are evening sessions, beginning at 4:00 p.m. and ending at 5:00 p.m. For more information, call Joyce Yensen at Med Chi's Legal Department, 410-539-0872 or call toll free in Md. at 1-800-492-1056.

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AMA advocates unity in health system reform

In his keynote address at the American Medical Association's Interim Meeting, AMA President John Lee Clowe, MD noted that elements of the AMA's Health Access America plan appeared in platforms of both political parties during the November election. These elements are expected to be incorporated into most of the legislation likely to come before the 103rd Congress. The AMA wants to enhance physician involvement in public and private regulation of medical care, encourage implementation of market-oriented reforms, and prevent adverse patient care that would result from price controls or stringent global budgets.

Most of the major players in the health system reform debate "realize that they can't achieve reform without the participation of the medical profession. Medicine must speak with one voice in the health system reform debate. Most look to the AMA as the voice of organized medicine in this process of change," he said.

AMA urges safeguards for patients' computer records

AMA testimony before the federal Task Force on Privacy of Private Sector Health Records pressed for more complex security for computerized patient records to protect privacy and to avoid legal problems. The AMA emphasized that patient records must remain confidential, accurate, comprehensible, and free from unauthorized access. The AMA recommends that physicians and other health care providers be expected to use reasonable safeguards, since there is no fail-safe protection.

New AMA guidelines focus on elder abuse

The AMA has issued its first guidelines on elder abuse, urging physicians and other health care professionals to be more alert to signs of neglect or mistreatment of older patients by families or other care givers. An estimated two million U.S. elderly are mistreated each year. "A physician may be the only person outside the family who sees the older adult regularly," said AMA Board of Trustee, Palma E. Formica, MD.

The AMA guidelines recommend physicians incorporate standard questions to screen for mistreatment into routine care.

- Be aware that abuse may be physical, psychological, financial or material, or any combination of these.
- Be aware that in institutions, elder abuse may be perpetrated by a staff member, another patient, an intruder or a visitor.
- Many states require physicians to report suspected elder abuse to designated state agency.
- Your duty to report suspected abuse supersedes doctor- patient confidentiality issues, most experts say.

Materials included are excerpted from *Member Matters*, a monthly publication sent to all members of the American Medical Association.

AMA health reform strategies for 1993

With the election of President-elect Clinton and the new Congress, the American Medical Association and the federation will have both opportunities and challenges regarding health policy. Many aspects of Clinton's proposals for health system reform are consistent with the AMA's own Health Access America. AMA leaders have already held discussions with Clinton's health transition team. The AMA wants to enhance physician involvement in public and private regulation of medical care, encourage implementation of market-oriented reforms, and prevent adverse patient care that would result from price controls or stringent global budgets.

Health Access America. In any reform plan, the AMA will continue to advocate key principles contained in Health Access America. The AMA will be a very aggressive advocate for patients and their physicians.

Federation Unity. Nearly all state medical associations have endorsed Health Access America while some national specialty societies have developed their own health care reform proposals. The AMA will emphasize our similarities to allow intensified coalition-building during the next critical months. Unity on key health reform principles will provide us with strategic leverage with the Administration and Congress.

Managed Competition. President-elect Clinton appears to favor managed competition where insurers, hospitals, and physicians would be encouraged to develop local "health networks." The AMA will:

- develop policy specifications to make sure the AMA remains at the forefront of the managed competition debate.
- lobby to include acceptable provisions and modify objectionable proposals.
- help physician members respond to managed competition.

Negotiations. The AMA will continue to seek relief from the antitrust laws to allow physician negotiation with both the federal government and private sector, and to pursue self- regulation.

Thanks to our long-term advocacy of health system reform, the AMA and the federation are well-positioned and well-equipped to be key players in the forth-coming debate.

Materials included are excerpted from *Member Matters*, a monthly publication sent to all members of the American Medical Association.

COMING OUT OF THE DARK

Med Chi's Physician Rehabilitation Committee deals with the substance abuse and mental health problems of Maryland physicians, with a confidential and nondisciplinary focus...Addiction, Marital/Family Conflicts, Psychiatric Illness, Organic Impairment, Physical Handicap...If these problems exist, we can help find the solution. Call us.

The Physician Rehabilitation Committee of Med Chi is available to all Maryland physicians, and their families. The Committee is NONDISCIPLINARY and information is kept CONFIDENTIAL. If you, a colleague, or family member is in need of our services call (410)962-5580 or call toll free (800)992-7010, or leave a message 24 hours a day, 7 days a week at (410)727-1020.

HELPING IS OUR BUSINESS...All donations to the Physician Rehabilitation Committee are used for the delivery of services to Maryland physicians in need of help. If you wish to help further the work of the Committee through a tax deductible donation send your check to: The Medical and Chirurgical Faculty Charitable/Educational Foundation, 1204 Maryland Avenue, Baltimore, Maryland 21201 Please note on your donation: "Physician Rehab"

Medical and Chirurgical Faculty of Maryland

Physician Rehabilitation Committee

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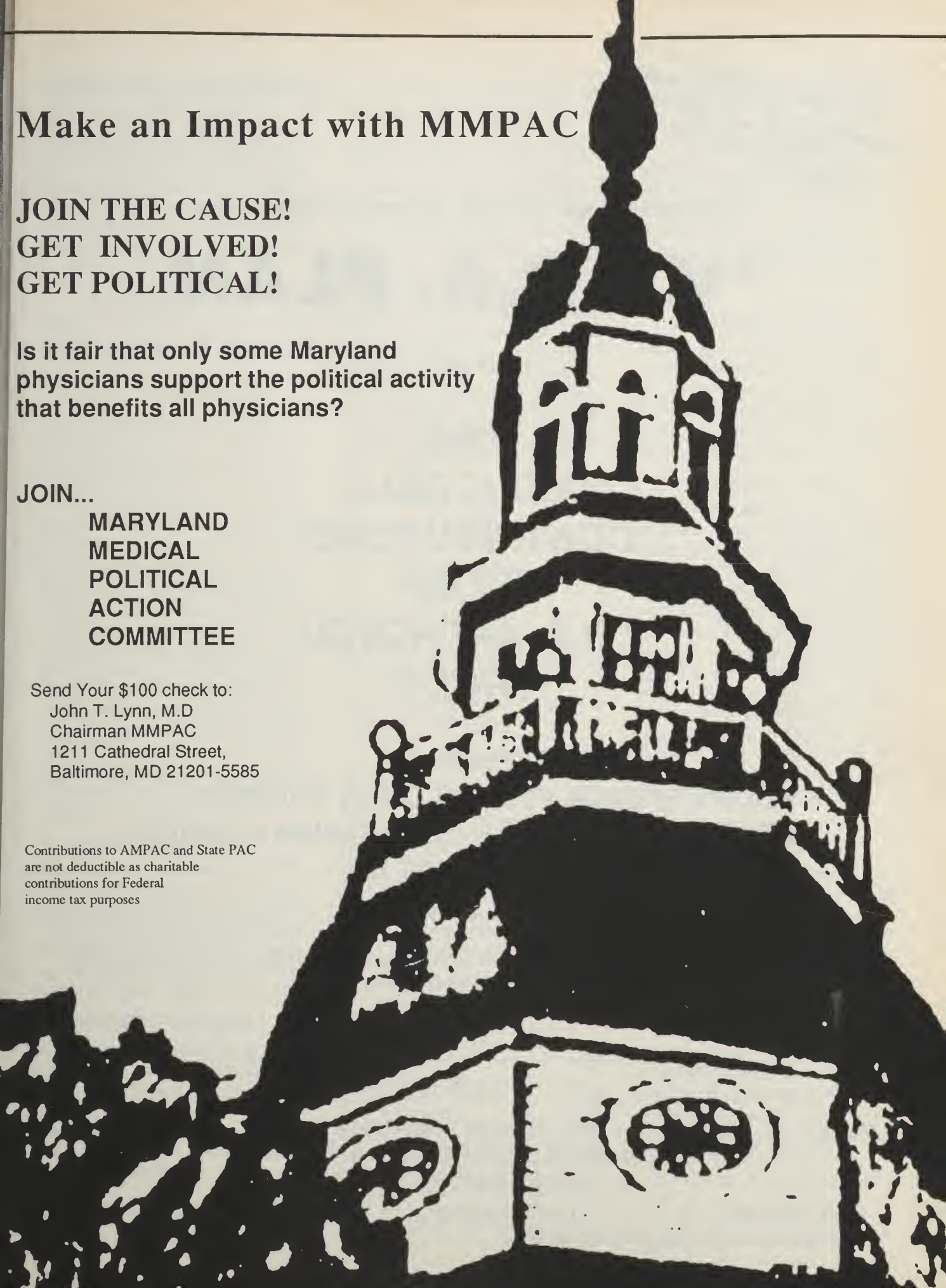
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Internist needs Board Certified Physician in Internal Medicine who is interested in expanding his practice with the possibility of a merger. Catonsville area. Should have a special interest in Geriatric Medicine. Respond to: Mrs. C. Beal, 410-744-4044.

PHYSICIAN WANTED

Retired or semi-retired—OK for centrally located Baltimore offices. Call 410-547-2676.

FAMILY PRACTITIONER

An excellent position is available for a BC/BE family practice physician in a new community health center in Sioux City, Iowa. A full range of family practice medicine is needed in a community that is very supportive of the center. Sioux City is a great place to raise a family and has excellent public and parochial school systems, a community college, two liberal arts colleges, a graduate center, two excellent medical centers, a Residency Training Program (Family Practice), etc. The center offers a competitive compensation and benefit package, paid malpractice, etc. For more information, write Jeff Hackett, Executive Director, Siouxland Community Health Center, 1709 Pierce St., Sioux City, IA 51105 or call 712-252-2477.

BC/BE PEDIATRICIAN

Pediatric group in the Maryland-Washington D.C. area seeks BC/BE pediatrician to work in an academic atmosphere close to four medical schools and teaching hospitals. Excellent benefit package. Please reply to: B. Glober, 12700 North Point Lane, Laurel, MD 20708.

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BC/BE to join 2 internists in the Baltimore-Washington D.C. area. Competitive salary, excellent benefits. Send C.V. to C.E. Sheehan, M.D. 10293/B Baltimore National Pike, Ellicott City, MD 21042 or FAX 410-313-8463, Phone 410-465-1090.

RESEARCH ASSOCIATE

Position available July 1, 1993. Applicants must hold a Ph.D., M.D. or equivalent. Interest in atherosclerosis research a must. Experience in tissue culture, molecular biology, immunohistochemistry, and electron microscopy. Duties include: (1) perform tissue collection and prep for experiments; (2) Data collection and interpretation; (3) molecular biology experiments; (4) preparation of grant proposals; (5) development of computer programs for morphometry. Send CV to: Wolfgang Mergner, M.D., Ph.D., Department of Pathology, University of Maryland, 22 S. Greene Street, Baltimore, MD 21201. EOE

MMJ

Classified Advertising

Effective with the 1993 April issue prepayment is required for all classified advertising.

- Cost for Med Chi members is $5.00 per 35 characters or portion thereof (each letter, number, symbol, punctuation mark, or space counts as one character).
- Cost for nonmembers is $8.00 per 35 characters or portion thereof with a minimum cost of $50.00 per advertisement.
- Advertisements placed for the benefit of an HMO or a hospital are charged the nonmember rate.
- Advertisements for services (e.g., collection agencies) or for items not related to the practice of medicine (e.g., real estate sales) are limited to a maximum of three placements per calendar year.
- Spouses of deceased members shall be entitled to two complimentary insertions for the disposal of the deceased physician's practice or equipment.
- Box numbers are provided free of charge.
- Advertising copy and payment (checks should be made out to *Maryland Medical Journal*) should be sent seven weeks prior to the first of the month in which the advertisement is to appear.

Box replies and advertising copy should be sent to
Lori Robinson
MMJ
1211 Cathedral St., Baltimore, MD 21201-5585.

For more information, call Lori Robinson at 410-539-0872 or 1-800-492-1056.

INTERNIST/FAMILY PRACTITIONER

Board Certified/Board Eligible, full or part-time for HMO facility in Timonium area. Challenging environment with excellent salary and benefits. Send CV to Dianne at Westminster Medical Center, 1130 Baltimore Blvd., Westminster, MD 21157.

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Practice EM with young, progressive group in suburban community hospital between Baltimore and Annapolis. 45K pts, triple coverage, excellent compensation. Commitment to wellbeing. EM, FP only. Call Dr. Davis, 410-544-9185.

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Board Certified/Board Eligible, full-time for HMO facility in Catonsville area. Challenging environment with excellent salary and benefits. Send CV to Dianne at Westminster Medical Center, 1130 Baltimore Blvd., Westminster, MD 21157.

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Pediatric group in Howard County needs BE/BC pediatrician to work 2/3's to full-time starting July 1993 or sooner. On call every seventh night. Competitive salary and benefits. Call Kenneth Klebanow, M.D. 410-997-1700.

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THIRTEEN MAY BE YOUR LUCKY NUMBER

Deadline for entries is Friday, March 19, 1993 ♦ Two categories: black & white or color
Open to all Med Chi and Auxiliary members ♦ First and second prizes awarded in each category

All photographs will be displayed at the 1993 Annual Meeting at the University of Maryland Adult Education Center, College Park.

Photo Contest Rules:

Eligibility: All members of Med Chi and members of the Auxiliary may enter. Professional photographers may not enter. Members of the Photo Contest Committee and their families are not eligible.

1. Photographs may be submitted in two categories: black and white or color.
2. Limit: three entries per person.
3. Prints only, no smaller than 8 x 10" or larger than 11 x 14" will be accepted. If your favorite shot is a slide, you must have a print made within these size ranges to enter the contest.
4. Entries must be matted or dry mounted. No framed photographs will be accepted.
5. Entries must have name, address, and telephone number attached to the back of each photograph.
6. Entries may be mailed or brought to Med Chi, 1211 Cathedral Street, Baltimore, MD 21201 by the close of the business day on March 19.
7. Photographs entered in the contest will be on display at the 1993 Annual Meeting.
8. Prizes will be awarded to the first and second place winners.
9. Winners will be announced at the Annual Meeting of the Medical and Chirurgical Faculty, April 29–May 1, 1993.
10. Photographs will not be mailed back. Photographs may be claimed at the exhibit area at the close of the Annual Meeting at noon on May 1, or at Med Chi thereafter.
11. Med Chi does not guarantee against loss or damage of any kind to the photographs submitted to the contest.

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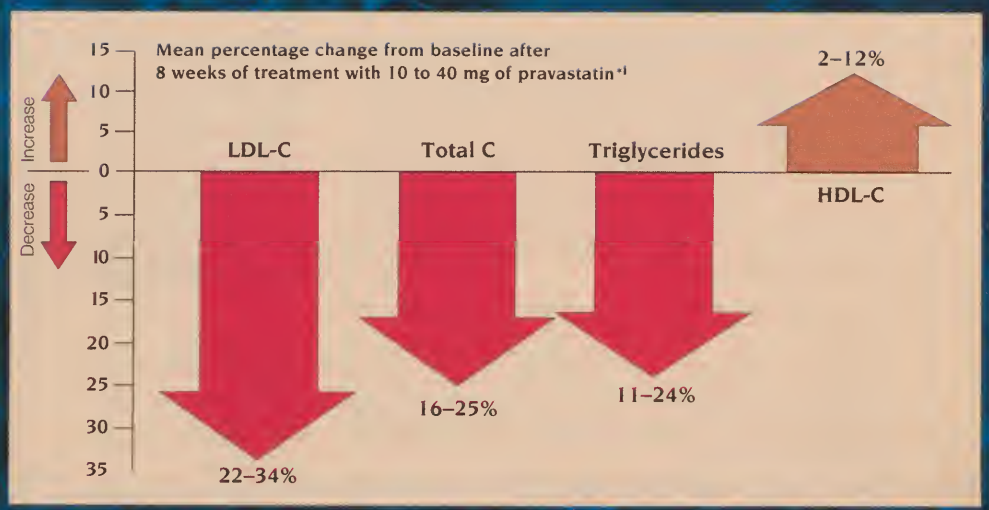
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Reference: 1. Jones PH, et al. Once-daily pravastatin in patients with primary hypercholesterolemia: a dose-response study. *Clin Cardiol.* 1991;14:146-151

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Please see CONTRAINDICATIONS, WARNINGS, PRECAUTIONS, and ADVERSE REACTIONS in the brief summary of prescribing information on the adjacent page.

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CONTRAINDICATIONS

Hypersensitivity to any component of this medication.

Active liver disease or unexplained, persistent elevations in liver function tests (see WARNINGS).

Pregnancy and lactation. Atherosclerosis is a chronic process and discontinuation of lipid-lowering drugs during pregnancy should have little impact on the outcome of long-term therapy of primary hypercholesterolemia. Cholesterol and other products of cholesterol biosynthesis are essential components for fetal development (including synthesis of steroids and cell membranes). Since HMG-CoA reductase inhibitors decrease cholesterol synthesis and possibly the synthesis of other biologically active substances derived from cholesterol, they may cause fetal harm when administered to pregnant women. Therefore, HMG-CoA reductase inhibitors are contraindicated during pregnancy and in nursing mothers. **Pravastatin should be administered to women of childbearing age only when such patients are highly unlikely to conceive and have been informed of the potential hazards.** If the patient becomes pregnant while taking this class of drug, therapy should be discontinued and the patient apprised of the potential hazard to the fetus.

WARNINGS

Liver Enzymes: HMG-CoA reductase inhibitors, like some other lipid-lowering therapies, have been associated with biochemical abnormalities of liver function. Increases of serum transaminase (ALT, AST) values to more than 3 times the upper limit of normal occurring on 2 or more (not necessarily sequential) occasions have been reported in 1.3% of patients treated with pravastatin in the U.S. over an average period of 18 months. These abnormalities were not associated with cholestasis and did not appear to be related to treatment duration. In those patients in whom these abnormalities were believed to be related to pravastatin and who were discontinued from therapy, the transaminase levels usually fell slowly to pretreatment levels. These biochemical findings are usually asymptomatic although worldwide experience indicates that anorexia, weakness, and/or abdominal pain may also be present in rare patients.

As with other lipid-lowering agents, liver function tests should be performed during therapy with pravastatin. Serum aminotransferases, including ALT (SGPT), should be monitored before treatment begins, every six weeks for the first three months, every eight weeks during the remainder of the first year, and periodically thereafter (e.g., at about six-month intervals). Special attention should be given to patients who develop increased transaminase levels. Liver function tests should be repeated to confirm an elevation and subsequently monitored at more frequent intervals. If increases in AST and ALT equal or exceed three times the upper limit of normal and persist, then therapy should be discontinued. Persistence of significant aminotransferase elevations following discontinuation of therapy may warrant consideration of liver biopsy.

Active liver disease or unexplained transaminase elevations are contraindications to the use of pravastatin (see CONTRAINDICATIONS). Caution should be exercised when pravastatin is administered to patients with a history of liver disease or heavy alcohol ingestion (see CLINICAL PHARMACOLOGY: Pharmacokinetics/Metabolism). Such patients should be closely monitored, started at the lower end of the recommended dosing range, and titrated to the desired therapeutic effect.

Skeletal Muscle: Rhabdomyolysis with renal dysfunction secondary to myoglobinuria has been reported with pravastatin and other drugs in this class. Uncomplicated myalgia has also been reported in pravastatin-treated patients (see ADVERSE REACTIONS). Myopathy, defined as muscle aching or muscle weakness in conjunction with increases in creatine phosphokinase (CPK) values to greater than 10 times the upper limit of normal was reported to be possibly due to pravastatin in only one patient in clinical trials (<0.1%). Myopathy should be considered in any patient with diffuse myalgias, muscle tenderness or weakness, and/or marked elevation of CPK. Patients should be advised to report promptly unexplained muscle pain, tenderness or weakness, particularly if accompanied by malaise or fever. **Pravastatin therapy should be discontinued if markedly elevated CPK levels occur or myopathy is diagnosed or suspected. Pravastatin therapy should also be temporarily withheld in any patient experiencing an acute or serious condition predisposing to the development of renal failure secondary to rhabdomyolysis, e.g., sepsis; hypotension; major surgery; trauma; severe metabolic, endocrine, or electrolyte disorders; or uncontrolled epilepsy.**

The risk of myopathy during treatment with lovastatin is increased if therapy with either cyclosporine, gemfibrozil, erythromycin, or niacin is administered concurrently. There is no experience with the use of pravastatin together with cyclosporine. Myopathy has not been observed in clinical trials involving small numbers of patients who were treated with pravastatin together with niacin. One trial of limited size involving combined therapy with pravastatin and gemfibrozil showed a trend toward more frequent CPK elevations and patient withdrawals due to musculoskeletal symptoms in the group receiving combined treatment as compared with the groups receiving placebo, gemfibrozil, or pravastatin monotherapy. Myopathy was not reported in this trial (see PRECAUTIONS: Drug Interactions). One patient developed myopathy when clofibrate was added to a previously well tolerated regimen of pravastatin; the myopathy resolved when clofibrate therapy was stopped and pravastatin treatment continued. **The use of fibrates alone may occasionally be associated with myopathy. The combined use of pravastatin and fibrates should generally be avoided.**

PRECAUTIONS

General: Pravastatin may elevate creatine phosphokinase and transaminase levels (see ADVERSE REACTIONS). This should be considered in the differential diagnosis of chest pain in a patient on therapy with pravastatin.

Homozygous Familial Hypercholesterolemia. Pravastatin has not been evaluated in patients with rare homozygous familial hypercholesterolemia. In this group of patients, it has been reported that HMG-CoA reductase inhibitors are less effective because the patients lack functional LDL receptors.

Renal Insufficiency. A single 20 mg oral dose of pravastatin was administered to 24 patients with varying degrees of renal impairment (as determined by creatinine clearance). No effect was observed on the pharmacokinetics of pravastatin or its 3α-hydroxy isomeric metabolite (SQ 31,906). A small increase was seen in mean AUC values and half-life ($t_{1/2}$) for the inactive enzymatic ring hydroxylation metabolite (SQ 31,945). Given this small sample size, the dosage administered, and the degree of individual variability, patients with renal impairment who are receiving pravastatin should be closely monitored.

Information for Patients: Patients should be advised to report promptly unexplained muscle pain, tenderness or weakness, particularly if accompanied by malaise or fever.

Drug Interactions: *Immunosuppressive Drugs, Gemfibrozil, Niacin (Nicotinic Acid), Erythromycin:* See WARNINGS: Skeletal Muscle.

Antipyrine: Clearance by the cytochrome P450 system was unaltered by concomitant administration of pravastatin. Since pravastatin does not appear to induce hepatic drug-metabolizing enzymes, it is not expected that any significant interaction of pravastatin with other drugs (e.g., phenytoin, quinidine) metabolized by the cytochrome P450 system will occur.

Cholestyramine/Colestipol: Concomitant administration resulted in an approximately 40 to 50% decrease in the mean AUC of pravastatin. However, when pravastatin was administered 1 hour before or 4 hours after cholestyramine or 1 hour before colestipol and a standard meal, there was no clinically significant decrease in bioavailability or therapeutic effect. (See DOSAGE AND ADMINISTRATION: Concomitant Therapy.)

Warfarin: In a study involving 10 healthy male subjects given pravastatin and warfarin concomitantly for 6 days, bioavailability parameters at steady state for pravastatin (parent compound) were not altered. Pravastatin did not alter the plasma protein-binding of warfarin. Concomitant dosing did increase the AUC and Cmax of warfarin but did not produce any changes in its anticoagulant action (i.e., no increase was seen in mean prothrombin time after 6 days of concomitant therapy). However, bleeding and extreme prolongation of prothrombin time has been reported with another drug in this class. Patients receiving warfarin-type anticoagulants should have their prothrombin times closely monitored when pravastatin is initiated or the dosage of pravastatin is changed.

Cimetidine: The $AUC_{0\text{-}12hr}$ for pravastatin when given with cimetidine was not significantly different from the AUC for pravastatin when given alone. A significant difference was observed between the AUC's for pravastatin when given with cimetidine compared to when administered with antacid.

Digoxin: In a crossover trial involving 18 healthy male subjects given pravastatin and digoxin concurrently for 9 days, the bioavailability parameters of digoxin were not affected. The AUC of pravastatin tended to increase, but the overall bioavailability of pravastatin plus its metabolites SQ 31,906 and SQ 31,945 was not altered.

Gemfibrozil: In a crossover study in 20 healthy male volunteers given concomitant single doses of pravastatin and gemfibrozil, there was a significant decrease in urinary excretion and protein binding of pravastatin. In addition, there was a significant increase in AUC, Cmax, and Tmax for the pravastatin metabolite SQ 31,906. Combination therapy with pravastatin and gemfibrozil is generally not recommended.

In interaction studies with *aspirin, antacids* (1 hour prior to PRAVACHOL), *cimetidine, nicotinic acid,* or *probucol,* no statistically significant differences in bioavailability were seen when PRAVACHOL (pravastatin sodium) was administered.

Other Drugs: During clinical trials, no noticeable drug interactions were reported when PRAVACHOL was added to: diuretics, antihypertensives, digitalis, converting-enzyme inhibitors, calcium channel blockers, beta-blockers, or nitroglycerin.

Endocrine Function: HMG-CoA reductase inhibitors interfere with cholesterol synthesis and lower circulating cholesterol levels and, as such, might theoretically blunt adrenal or gonadal steroid hormone production. Results of clinical trials with pravastatin in males and post-menopausal females were inconsistent with regard to possible effects of the drug on basal steroid hormone levels. In a study of 21 males, the mean testosterone response to human chorionic gonadotropin was significantly reduced ($p<0.004$) after 16 weeks of treatment with 40 mg of pravastatin. However, the percentage of patients showing a ≥50% rise in plasma testosterone after human chorionic gonadotropin stimulation did not change significantly after therapy in these patients. The effects of HMG-CoA reductase inhibitors on spermatogenesis and fertility have not been studied in adequate numbers of patients. The effects, if any, of pravastatin on the pituitary-gonadal axis in pre-menopausal females are unknown. Patients treated with pravastatin who display clinical evidence of endocrine dysfunction should be evaluated appropriately. Caution should also be exercised if an HMG-CoA reductase inhibitor or other agent used to lower cholesterol levels is administered to patients also receiving other drugs (e.g., ketoconazole, spironolactone, cimetidine) that may diminish the levels or activity of steroid hormones.

CNS Toxicity: CNS vascular lesions, characterized by perivascular hemorrhage and edema and mononuclear cell infiltration of perivascular spaces, were seen in dogs treated with pravastatin at a dose of 25 mg/kg/day, a dose that produced a plasma drug level about 50 times higher than the mean drug level in humans taking 40 mg/day. Similar CNS vascular lesions have been observed with several other drugs in this class.

A chemically similar drug in this class produced optic nerve degeneration (Wallerian degeneration of retinogeniculate fibers) in clinically normal dogs in a dose-dependent fashion starting at 60 mg/kg/day, a dose that produced mean plasma drug levels about 30 times higher than the mean drug level in humans taking the highest recommended dose (as measured by total enzyme inhibitory activity). This same drug also produced vestibulocochlear Wallerian-like degeneration and retinal ganglion cell chromatolysis in dogs treated for 14 weeks at 180 mg/kg/day, a dose which resulted in a mean plasma drug level similar to that seen with the 60 mg/kg dose.

Carcinogenesis, Mutagenesis, Impairment of Fertility: In a 2-year study in rats fed pravastatin at doses of 10, 30, or 100 mg/kg body weight, there was an increased incidence of hepatocellular carcinomas in males at the highest dose ($p<0.01$). Although rats were given up to 125 times the human dose (HD) on a mg/kg body weight basis, their serum drug levels were only 6 to 10 times higher than those measured in humans given 40 mg pravastatin as measured by AUC.

The oral administration of 10, 30, or 100 mg/kg (producing plasma drug levels approximately 0.5 to 5.0 times human drug levels at 40 mg) of pravastatin to mice for 22 months resulted in a statistically significant increase in the incidence of malignant lymphomas in treated females when all treatment groups were pooled and compared to controls ($p<0.05$). The incidence was not dose-related and male mice were not affected.

A chemically similar drug in this class was administered to mice for 72 weeks at 25, 100, and 400 mg/kg body weight, which resulted in mean serum drug levels approximately 3, 15, and 33 times higher than the mean human serum drug concentration (as total inhibitory activity) after a 40 mg oral dose. Liver carcinomas were significantly increased in high-dose females and mid- and high-dose males, with a maximum incidence of 90 percent in males. The incidence of adenomas of the liver was significantly increased in mid- and high-dose females. Drug treatment also significantly increased the incidence of lung adenomas in mid- and high-dose males and females. Adenomas of the eye Harderian gland (a gland of the eye of rodents) were significantly higher in high-dose mice than in controls.

No evidence of mutagenicity was observed *in vitro*, with or without rat-liver metabolic activation, in the following studies: microbial mutagen tests, using mutant strains of *Salmonella typhimurium* or *Escherichia coli;* a forward mutation assay in L5178Y TK +/− mouse lymphoma cells; a chromosomal aberration test in hamster cells; and a gene conversion assay using *Saccharomyces cerevisiae*. In addition, there was no evidence of mutagenicity in either a dominant lethal test in mice or a micronucleus test in mice.

In a study in rats, with daily doses up to 500 mg/kg, pravastatin did not produce any adverse effects on fertility or general reproductive performance. However, in a study with another HMG-CoA reductase inhibitor, there was decreased fertility in male rats treated for 34 weeks at 25 mg/kg body weight, although this effect was not observed in a subsequent fertility study when this same dose was administered for 11 weeks (the entire cycle of spermatogenesis, including epididymal maturation). In rats treated with this same reductase inhibitor at 180 mg/kg/day, seminiferous tubule degeneration (necrosis and loss of spermatogenic epithelium) was observed. Although not seen with pravastatin, two similar drugs in this class caused drug-related testicular atrophy, decreased spermatogenesis, spermatocytic degeneration, and giant cell formation in dogs. The clinical significance of these findings is unclear.

Pregnancy: Pregnancy Category X: See CONTRAINDICATIONS.

Safety in pregnant women has not been established. Pravastatin was not teratogenic in rats at doses up to 1000 mg/kg daily or in rabbits at doses of up to 50 mg/kg daily. These doses resulted in 20x (rabbit) or 240x (rat) the human exposure based on surface area ($mg/meter^2$). However, in studies with another HMG-CoA reductase inhibitor, skeletal malformations were observed in rats and mice. PRAVACHOL (pravastatin sodium) should be administered to women of child-bearing potential only when such patients are highly unlikely to conceive and have been informed of the potential hazards. If the woman becomes pregnant while taking PRAVACHOL (pravastatin sodium), it should be discontinued and the patient advised again as to the potential hazards to the fetus.

Nursing Mothers: A small amount of pravastatin is excreted in human breast milk. Because of the potential for serious adverse reactions in nursing infants, women taking PRAVACHOL should not nurse (see CONTRAINDICATIONS).

Pediatric Use: Safety and effectiveness in individuals less than 18 years old have not been established. Hence, treatment in patients less than 18 years old is not recommended at this time. (See also PRECAUTIONS: **General**.)

ADVERSE REACTIONS

Pravastatin is generally well tolerated; adverse reactions have usually been mild and transient. In 4-month long placebo-controlled trials, 1.7% of pravastatin-treated patients and 1.2% of placebo-treated patients were discontinued from treatment because of adverse experiences attributed to study drug therapy; this difference was not statistically significant. In long-term studies, the most common reasons for discontinuation were asymptomatic serum transaminase increases and mild, non-specific gastrointestinal complaints. During clinical trials the overall incidence of adverse events in the elderly was not different from the incidence observed in younger patients.

Adverse Clinical Events: All adverse clinical events (regardless of attribution) reported in more than 2% of pravastatin-treated patients in the placebo-controlled trials are identified in the table below; also shown are the percentages of patients in whom these medical events were believed to be related or possibly related to the drug:

	All Events %		Events Attributed to Study Drug %	
Body System/Event	Pravastatin (N = 900)	Placebo (N = 411)	Pravastatin (N = 900)	Placebo (N = 411)
Cardiovascular				
Cardiac Chest Pain	4.0	3.4	0.1	0.0
Dermatologic				
Rash	4.0*	1.1	1.3	0.9
Gastrointestinal				
Nausea/Vomiting	7.3	7.1	2.9	3.4
Diarrhea	6.2	5.6	2.0	1.9
Abdominal Pain	5.4	6.9	2.0	3.9
Constipation	4.0	7.1	2.4	5.1
Flatulence	3.3	3.6	2.7	3.4
Heartburn	2.9	1.9	2.0	0.7
General				
Fatigue	3.8	3.4	1.9	1.0
Chest Pain	3.7	1.9	0.3	0.2
Influenza	2.4*	0.7	0.0	0.0
Musculoskeletal				
Localized Pain	10.0	9.0	1.4	1.5
Myalgia	2.7	1.0	0.6	0.0
Nervous System				
Headache	6.2	3.9	1.7*	0.2
Dizziness	3.3	3.2	1.0	0.5
Renal/Genitourinary				
Urinary Abnormality	2.4	2.9	0.7	1.2
Respiratory				
Common Cold	7.0	6.3	0.0	0.0
Rhinitis	4.0	4.1	0.1	0.0
Cough	2.6	1.7	0.1	0.0

*Statistically significantly different from placebo.

The following effects have been reported with drugs in this class:

Skeletal: myopathy, rhabdomyolysis.

Neurological: dysfunction of certain cranial nerves (including alteration of taste, impairment of extra-ocular movement, facial paresis), tremor, vertigo, memory loss, paresthesia, peripheral neuropathy, peripheral nerve palsy.

Hypersensitivity Reactions: An apparent hypersensitivity syndrome has been reported rarely which has included one or more of the following features: anaphylaxis, angioedema, lupus erythematous-like syndrome, polymyalgia rheumatica, vasculitis, purpura, thrombocytopenia, leukopenia, hemolytic anemia, positive ANA, ESR increase, arthritis, arthralgia, urticaria, asthenia, photosensitivity, fever, chills, flushing, malaise, dyspnea, toxic epidermal necrolysis, erythema multiforme, including Stevens-Johnson syndrome.

Gastrointestinal: pancreatitis, hepatitis, including chronic active hepatitis, cholestatic jaundice, fatty change in liver, and, rarely, cirrhosis, fulminant hepatic necrosis, and hepatoma; anorexia, vomiting.

Reproductive: gynecomastia, loss of libido, erectile dysfunction.

Eye: progression of cataracts (lens opacities), ophthalmoplegia.

Laboratory Test Abnormalities: Increases in serum transaminase (ALT, AST) values and CPK have been observed (see WARNINGS).

Transient, asymptomatic eosinophilia has been reported. Eosinophil counts usually returned to normal despite continued therapy. Anemia, thrombocytopenia, and leukopenia have been reported with other HMG-CoA reductase inhibitors.

Concomitant Therapy: Pravastatin has been administered concurrently with cholestyramine, colestipol, nicotinic acid, probucol and gemfibrozil. Preliminary data suggest that the addition of either probucol or gemfibrozil to therapy with lovastatin or pravastatin is **not** associated with greater reduction in LDL-cholesterol than that achieved with lovastatin or pravastatin alone. No adverse reactions unique to the combination or in addition to those previously reported for each drug alone have been reported. Myopathy and rhabdomyolysis (with or without acute renal failure) have been reported when another HMG-CoA reductase inhibitor was used in combination with immunosuppressive drugs, gemfibrozil, erythromycin, or lipid-lowering doses of nicotinic acid. Concomitant therapy with HMG-CoA reductase inhibitors and these agents is generally not recommended. (See WARNINGS: **Skeletal Muscle** and PRECAUTIONS: **Drug Interactions.**)

OVERDOSAGE

There have been no reports of overdoses with pravastatin.

Should an accidental overdose occur, treat symptomatically and institute supportive measures as required.

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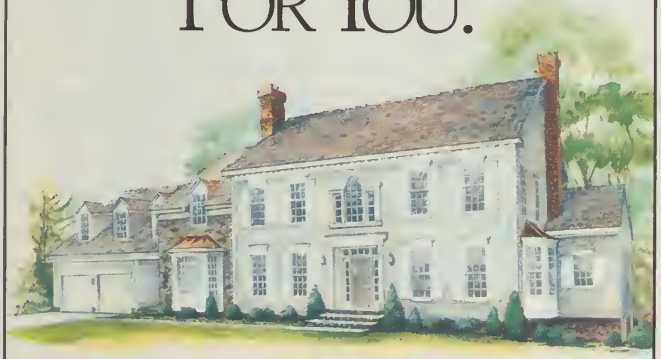
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Open to all Med Chi and Auxiliary members ♦ First and second prizes awarded in each category

All photographs will be displayed at the 1993 Annual Meeting at the University of Maryland Adult Education Center, College Park.

Photo Contest Rules:

Eligibility: All members of Med Chi and members of the Auxiliary may enter. Professional photographers may not enter. Members of the Photo Contest Committee and their families are not eligible.

1. Photographs may be submitted in two categories: black and white or color.
2. Limit: three entries per person.
3. Prints only, no smaller than 8 x 10" or larger than 11 x 14" will be accepted. If your favorite shot is a slide, you must have a print made within these size ranges to enter the contest.
4. Entries must be matted or dry mounted. No framed photographs will be accepted.
5. Entries must have name, address, and telephone number attached to the back of each photograph.
6. Entries may be mailed or brought to Med Chi, 1211 Cathedral Street, Baltimore, MD 21201 by the close of the business day on March 19.
7. Photographs entered in the contest will be on display at the 1993 Annual Meeting.
8. Prizes will be awarded to the first and second place winners.
9. Winners will be announced at the Annual Meeting of the Medical and Chirurgical Faculty, April 29–May 1, 1993.
10. Photographs will not be mailed back. Photographs may be claimed at the exhibit area at the close of the Annual Meeting at noon on May 1, or at Med Chi thereafter.
11. Med Chi does not guarantee against loss or damage of any kind to the photographs submitted to the contest.

Committee Selection Card

Executive Director's Newsletter

Annual Meeting Preliminary Program

Following this newsletter is a revised preliminary program for Med Chi's 1993 Annual Meeting: "Prevention '93 — Maryland." The preliminary program features detailed information about the meeting including speakers and course objectives for continuing medical education sessions. To register for this meeting, complete the registration form following the preliminary program.

Committee Selection Cards 1993-1994

Med Chi's committees are the backbone of our organization. Decisions made by Med Chi's House of Delegates, Council, and Executive Committee are often guided by the advice of physicians who serve on the more than 45 Med Chi committees. If you are interested in serving on a Med Chi committee during the 1993-1994 committee year, please complete the selection card following this newsletter. Any member can serve on a committee, but you must complete the attached card to be considered for appointment.

BCBSM Executives Visit Med Chi

Three top executives from Blue Cross and Blue Shield of Maryland (BCBSM) met with Med Chi physicians on February 24, 1993 to discuss physician concerns regarding BCBSM. Frank A. Gunther, Jr, chairperson of the board; William Beasman, acting chief executive officer; and Arthur T. Keefe, Jr., M.D., executive vice president, medical affairs, spoke to over 40 physicians about BCBSM. Mr. Gunther assured physicians that BCBSM is a solvent organization. "Our major concern is not a financial concern," said Mr. Gunther, "it's a service concern." Both Mr. Gunther and Mr. Beasman stressed that BCBSM is addressing its service problems for both providers and subscribers.

For more information about recent events at BCBSM, see the article on page 146 of this *MMJ*. A more detailed account of the February 24th meeting will be featured in the March 1993 *MMJ*.

Performing Arts Medicine Conference

"Performing Arts Medicine II: Focus on Young Performers" is a conference on the special problems of performing artists scheduled for March 20-21, 1993 at the Med Chi Faculty Building, 1211 Cathedral Street, Baltimore. Sponsored by Med Chi's Committee on Medicine and the Performing Arts, this conference will include discussions on focal dystonia, eating disorders, Alexander and Feldenkrais techniques, drug side effects, conditioning and physical fitness, problems of marching musicians, and implications of the Americans with Disabilities Act. For more information about this conference, see the ad on pages 218-219 of this *MMJ*.

Room Reservations for 1993 Annual Meeting

Because of busy metropolitan Washington traffic, a long commute, early morning and late evening meetings, Med Chi is encouraging physicians to stay overnight during the 1993 annual meeting. Med Chi has reserved a limited number of rooms at the University of Maryland University College Conference Center in College Park, Maryland at a special group rate of $65.00 for a single occupancy and

$85.00 for a double occupancy room. For room reservations, call 1-800-727-8622 and give Med Chi's group number: G2568. Reservations must be made by March 29, 1993.

"Clearing the Air About Poisonous Gas"

"Clearing the Air About Poisonous Gas" is a special seminar concerning the medical management and the treatment of poison gas intoxication to be held April 29, 1993 at the University of Maryland University College Conference Center in College Park, Maryland from 1:00 p.m. to 5:30 p.m. This seminar, which fulfills 4 CME credits, includes two sessions: a presentation and a panel of experts. Henry J. Seigelson, M.D., F.A.C.E.P., chairperson of the American College of Emergency Physicians' Disaster Section, is the principal speaker. The panel of experts will respond to questions regarding the management of chemical disasters to include contamination, facility/victim decontamination, protective clothing, and treatment of chemical agent victims.

In view of the mustard gas disposal plan at Edgewood arsenal, Med Chi recognizes the importance of educating and training physicians, hospital staff (medical management personnel), nurses, pre-hospital care providers, and others who may be involved in chemical exposure, patient treatment, and facility management roles. There is no charge for this seminar; we are providing this instruction as a public service for you. To register or receive a brochure describing this seminar, contact Med Chi's Communications Department at 410-539-0872 or at 1-800-492-1056.

Seminar for Young Physicians

Physicians under 40 are encouraged to attend "Practice Management Strategies for Young Physicians," a complimentary luncheon seminar sponsored by *Physician's Practice Digest* that will provide useful information on the business side of medical practice. This seminar will be held during the Med Chi annual meeting on Saturday, May 1, 1993, at 12:00 p.m. at the University of Maryland University College Conference Center in College Park, Maryland. To register for this seminar, complete the registration form in the preliminary program following this newsletter.

President's Regional Conference

The President's Regional Conference for Southern Maryland will be held at the Holiday Inn in Solomons, Maryland at 4:30 p.m. on April 1, 1993. Surveys have been mailed to physicians in southern Maryland requesting that they submit subjects of interest. If you wish to submit a topic for the meeting or if you have any questions, call Joan Mannion at 410-539-0872 or 1-800-492-1056.

Med Chi Helps Legislators Quit Smoking

As part of its anti-smoking initiative, Med Chi recently invited Maryland's legislators and their families to attend a special session on "How to Stop Smoking" on March 24, 1993, at the Maryland Inn in Annapolis. During this special presentation, Kevin S. Ferentz, M.D., assistant professor of family medicine and director of Student and Employee Health at the University of Maryland at Baltimore, will explain a number of innovative ways to break the smoking habit.

Maryland physicians are reminded that over 7,600 Maryland citizens die from cigarette-related illnesses each year. That's more than die from alcohol and other drugs, homicide, suicide, car accidents, fires, and AIDS combined. Maryland physicians are encouraged to take part in Med Chi's anti-smoking campaign by encouraging patients to quit smoking.

Anti-Smoking Warning Labels for Magazines

Physicians are encouraged to use Med Chi's new peel-and-stick warning labels for magazines that contain tobacco advertising. The labels read: "Warning: This magazine contains cigarette advertisements. Your physician does not support the use of any tobacco products or the advertising of such products." A sample of the labels appeared in the January issue of the *MMJ*. Additional labels are available at no charge by calling Med Chi's switchboard operator at 410-539-0872 or 1-800-492-1056.

Substance Abuse Education

"Substance Abuse Education for Primary Care Physicians: An Overview of Treating the Substance Abusing Patient" is a Med Chi sponsored program that can be delivered in a 1–3 hour format. This program, which can be held at the Med Chi Building or your place of work, is offered at no charge through August 1993. This program is made possible by a special grant and is limited to locations in Baltimore City. For more information, contact Sandra Heim at 410-539-0872 or 1-800-492-1056.

Maryland Elder C.A.R.E.

Maryland Elder C.A.R.E. is a service not available to the general public, but it is available to you as a Med Chi member. Maryland Elder C.A.R.E. recommends options for elder care aimed at the highest quality of life for the longest possible time. This is a personal service that can help you plan for the complex needs and responsibilities of an elderly relative, which can be time-consuming and confusing. Med Chi members who use Maryland Elder C.A.R.E. pay a service fee of $125 for a professional phone consultation. To use these services, call 1-800-734-7545 and identify yourself as a Med Chi member. If you have any questions about this membership benefit, please call Vivian Smith in Public Relations at 410-539-0872 or 1-800-492-1056.

Maritime Atlantic Insurance Company, Inc.

Med Chi has received notice from the Consumer Affairs Division of the Maryland Department of Licensing and Regulation that the Commissioner of Insurance of the State of Georgia has advised that the Maritime Atlantic Insurance Company, Ltd. may not act as an insurer in the State of Georgia or any other jurisdiction.

This company, in association with Physicians Reliance Association, Inc., has been offering medical malpractice insurance to physicians. Medical professionals should be advised that this company is not authorized to write insurance in Maryland.

Physician Testimony in Annapolis

During the legislative session, many physicians may be requested to provide expert testimony in Annapolis as an official representative of the Medical and Chirurgical Faculty of Maryland. Med Chi greatly appreciates the time and effort of the many physicians who have already served in this important capacity.

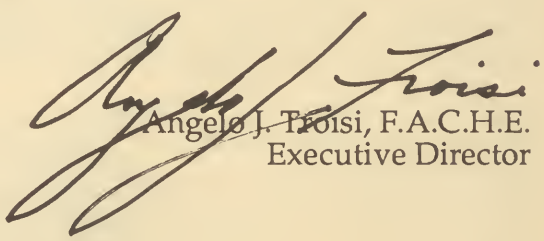
There are two scenarios in which you may be requested to provide testimony:

1. You may be asked to testify on legislation or an issue that pertains to a Med Chi committee on which you serve.
2. On certain occasions, you may be requested to testify because of your knowledge or expertise in a particular specialty or area of legislative interest.

If you are requested to testify, you will be notified by Med Chi's legislative office about the date and time of the hearing. Med Chi will also brief you on the official position of the Faculty and provide you with copies of written testimony to be submitted to legislators during the hearing. All physicians who provide expert testimony are encouraged to fully cooperate with Med Chi's legislative office regarding Med Chi's official position.

For physicians who wish to testify as private individuals, it is very important that you do not convey the perception that you are in any way representing the Medical and Chirurgical Faculty of Maryland.

Med Chi is grateful for your cooperation in helping to coordinate our efforts in this significant area.



Angelo J. Troisi, F.A.C.H.E.
Executive Director

195th Annual Meeting
of the
Medical and Chirurgical Faculty of Maryland
at the
University of Maryland
University College Conference Center
College Park, Maryland

Thursday-Saturday, April 29-May 1, 1993

Prevention 1993 — Maryland

Preliminary Agenda*

Thursday, April 29, 1993

8:30 am - 5:00 pm — **Registration/ Exhibits open**

9:00 am - 4:00 pm — **Auxiliary—44th Annual Meeting**

9:00 am - 10:30 am — **"Early Intervention in Rheumatoid Arthritis: Does It Make a Difference?"**
Maryland Society for Rheumatic Diseases
CME Credit: 1.5

9:00 am - 10:30 am — **"Case Management of the Seropositive HIV Patient"**
Med Chi Committee on Aids
CME Credit: 1.5

9:00 am - 10:30 am — **"Substance Abuse Education for Primary Care Physicians: An Overview of Treating the Substance Abusing Patient"**
Med Chi Department of Education
CME Credit: 1.5

10:30 am - 11:00 am — **Break—Visit the Exhibits**

11:00 am - 12:00 noon — **"Cues and Clues in Performing Arts Medicine"**
Med Chi Committee on Medicine and the Performing Arts
CME Credit: 1

11:00 am - 12:00 noon — **"Blue Cross and Blue Shield of Maryland Update: An Address by BCBSM Executives"**
Med Chi Insurance Fund
CME Credit: None

12:00 noon - 1:00 pm — **Lunch on your own**

12:00 noon - 2:00 pm — **Auxiliary Past Presidents' Gavel Club Luncheon/ Component Presidents and Presidents-elect Luncheon**

1:00 pm - 5:30 pm — **"Clearing the Air about Poisonous Gas"**
Med Chi Committee on Scientific Activity and the Maryland Chapter, American College of Emergency Physicians
CME Credit: 4
(Physicians attending this conference are requested to pre-register. See the registration form for details.)

1:00 pm - 3:00 pm — **"Medical Management in Home Care"**
Med Chi Committee on Long-Term Care and Geriatrics
CME Credit: 2

3:00 pm - 3:30 pm — **Break—Visit the Exhibits**

Support Our Exhibitors

Exhibits are an important part of Med Chi's annual meeting and are a valuable adjunct to the scientific program.

By visiting the exhibits before and after your scientific program, you will help ensure that Med Chi receives valuable income that allows us to offer you annual and semiannual meetings.

Med Chi urges you to express your appreciation to exhibitors by visiting their booths and discussing your mutual involvement in patient care.

* Please note this is a preliminary agenda. More meetings, events, and continuing medical education activities may be added to the advance program which will be published in the *Maryland Medical Journal* prior to the meeting.

Thursday, April 29, 1993

3:30 pm - 4:30 pm — **"Preventing and Responding to Domestic Violence: What Every Physician Should Know"**
Med Chi Public Relations Committee, Med Chi Committee on Public Health, and the Med Chi Auxiliary
CME Credit: 1

3:30 pm - 5:30 pm — **"Preventive Health Care for the Elderly Patient"**
Med Chi Committee on Long-Term Care and Geriatrics and the Prince George's County Medical Society
CME Credit: 2

3:30 pm - 6:00 pm — **"Computers in the Medical Office—Using Computers Prophylactically"**
Med Chi Computers in Medicine Committee
CME Credit: None

4:45 pm - 5:45 pm — **"Prevention of Coronary Artery Disease in Women"**
Med Chi Committee on Women in Medicine
CME Credit: 1

Directions

The University of Maryland University College Conference Center is located at the corner of University Boulevard and Adelphi Road in College Park, Maryland.

From Baltimore and points north: Take I-95 South to the Capital Beltway (I-495) toward College Park. Take exit for U.S. 1 South (Exit 25B). Proceed approximately 1 mile south on U.S. 1 and turn right onto MD Route 193 West. At 3rd traffic light, turn left onto Adelphi Road. On Adelphi, make first immediate left onto Campus Drive. The Conference Center will be visible on your left. Parking for guests is available in the 4th driveway on the left.*

From Bowie/Annapolis areas and points east: Take MD Route 50 to Capital Beltway (I-95). Go north on 95 to College Park. Take exit U.S. 1 South (Exit 25B). Proceed approximately 1 mile south on U.S. 1 and turn right onto MD Route 193 West. At 3rd traffic light, turn left onto Adelphi Road. On Adelphi, make first immediate left onto Campus Drive. The Conference Center will be visible on your left. Parking for guests is available in the 4th driveway on the left.*

From Washington, D.C.: Take George Washington Parkway to I-495 (toward Rockville). Follow I-495 and take exit for New Hampshire Avenue/Takoma Park (650). Go south on New Hampshire Avenue and turn left at the second light (Adelphi Road). Stay on Adelphi Road for approximately 3 miles (you will go through 3 traffic lights). At the 4th light, turn left on Campus Drive. The Conference Center will be visible on your left. Parking for guests is available in the 4th driveway on the left.*

From Montgomery County and points west: Take the Capital Beltway (I-495) to New Hampshire Avenue/Takoma Park (650). Go south on New Hampshire Avenue and turn left at the second light (Adelphi Road). Stay on Adelphi Road for approximately 3 miles (you will go through 3 traffic lights). At the 4th light, turn left onto Campus Drive. The Conference Center will be visible on your left. Parking for guests is available in the 4th driveway on the left.*

* A parking garage for the Conference Center is scheduled to be completed May 1, 1993. If necessary, Med Chi will publish updates about parking at the Conference Center in the *MMJ*.

Friday, April 30, 1993

7:30 am - 5:00 pm — **Registration**

8:00 am - 5:00 pm — **Exhibits open**

8:30 am - 5:00 pm — **Auxiliary—44th Annual Meeting**

8:00 am - 10:00 am — **"Medicine on Trial: An Interactive Risk Management Program for Physicians"**
Medical Mutual Liability Insurance Society of Maryland
CME Credit: 2

10:00 am - 12:00 noon — **Med Chi Council Meeting**

11:30 am - 12:30 pm — ***Robinson Memorial Lectureship in Dermatology*—"Pulsed Dye Laser Therapy of Cutaneous Vascular Lesions"**
Maryland Dermatologic Society
CME Credit: 1

12:00 noon - 1:00 pm — **Lunch on your own**

12:00 noon - 4:00 pm — **Auxiliary Luncheon and Auction**

12:00 noon - 1:00 pm — **Prayer Luncheon—"Unnecessary Treatment in Terminal Illness: Overutilization?"**
Med Chi Committee on Medicine and Religion
CME Credit: 1
(An additional fee required to attend this luncheon. See registration form for details.)

1:00 pm - 2:00 pm — **"Health Care Reform"**
CME Credit: None

2:30 pm - 4:00 pm — **Med Chi House of Delegates Meeting**

Friday, April 30, 1993

3:30 pm - 4:30 pm — **"Update on Injury Prevention in the Workplace"**
Maryland Society of Physical Medicine and Rehabilitation and the Maryland Society of Orthopaedic Rehabilitation and Occupational Medicine
CME Credit: 1

3:30 pm - 5:30 pm — **"Demystifying the Essentials: CME Policies and Procedures"**
Med Chi Continuing Medical Education Review Committee
CME Credit: 2

Continuing Medical Education Credits

The Medical and Chirurgical Faculty of Maryland is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor continuing medical education for physicians.

The Medical and Chirurgical Faculty of Maryland designates this continuing medical education activity for up to 15.5 credit hours in Category 1 of the Physician"s Recognition Award of the American Medical Association. Physicians attending this year's meeting can earn up to a maximum of 15.5 CME credits.

Saturday, May 1, 1993

8:00 am - 12:00 noon — **Registration/ Exhibits open**

8:30 am - 10:00 am — **"Treatment of Depression as Secondary Prevention"**
Med Chi Committee on Mental Health and the Maryland Psychiatric Society
CME Credit: 1.5

8:30 am - 10:00 am — **"Prevention of Headaches/Anxiolytics and Narcotics—Prescription vs. Abuse"**
Med Chi Committee on Drugs
CME Credit: 1.5

8:30 am - 10:00 am — **"Prevention of Disease in Pediatrics and Primary and Secondary Cancer Prevention"**
Maryland Academy of Family Physicians and the Department of Family Medicine at the University of Maryland at Baltimore
CME Credit: 1.5

10:00 am - 12:00 noon — **"Latex Anaphylaxis and an Overview of Intraoperative Anaphylaxis"**
Maryland Asthma and Allergy Society
CME Credit: 2

10:00 am - 12:00 noon — **"Prevention of Heart Disease and Stroke, the Basics and the Controversies"**
American Heart Association-Maryland Affiliate, Inc.
CME Credit: 2

10:00 am - 10:30 am — **Break—Visit the Exhibits**

10:30 am - 12:00 noon — **"Recent Breakthroughs in Understanding and Reducing Physician Stress"**
Med Chi Physician Rehabilitation Committee
CME Credit: 1.5

10:30 am - 11:30 am — **"Breast Cancer Prevention"**
Committee on Scientific Activity and the Department of Surgery, University of Maryland School of Medicine
CME Credit: 1

12:00 noon - 1:00 pm — **Lunch on your own**

12:00 noon - 1:30 pm — **"Practice Management Strategies for Young Physicians"**
sponsored by Physician's Practice Digest
(Pre-registration is required for this luncheon meeting. See registration form for details.)

1:30 pm - 4:00 pm — **Med Chi House of Delegates**
(Med Chi Council Meeting immediately follows the House of Delegates Meeting.)

6:00 pm - 1:00 am — **Presidential Banquet Honoring Jose M. Yosuico, M.D. and Joseph Snyder, M.D.**
(An additional fee is required to attend this function. See registration form for details.)

Registration Form

Please print clearly:

Name _____

Address _____

City _____ State _____ Zip _____

Telephone _____ County Society _____

Check all boxes that apply

❑ Med Chi Member — No Charge

❑ Pre-registered nonmember $35.00/presentation hour*

i.e. $35.00 x _____ hours = $_____

(Note: There is no charge for "Clearing the Air About Poisonous Gas")

*There will be an additional on-site registration fee of $15.00 for non-members who do not pre-register.

Event Pre-registration*

❑ **"Clearing the Air About Poisonous Gas"** — No Charge

Thursday, April 29, 1993 1:00 pm - 5:30 pm

Med Chi Committee on Scientific Activity and the Maryland Chapter, American College of Emergency Physicians

CME Credit: 4

❑ **Prayer Luncheon — "Unnecessary Treatment in Terminal Illness: Overutilization?"** — $15.00 _____

Friday, April 30, 1993 12:00 noon - 1:00 pm

Med Chi Committee on Medicine and Religion

CME Credit: 1

❑ **"Practice Management Strategies for Young Physicians"** — No Charge

Saturday, May 1, 1993 12:00 noon - 1:30 pm

a special luncheon meeting sponsored by Physician's Practice Digest

CME Credit: None

❑ **Presidential Banquet Honoring Jose M. Yosuico, M.D. and Joseph Snyder, M.D.** — $60.00 _____

Saturday, May 1, 1993 6:00 pm - 1:00 am

Total $_____

Form of payment (check one)

❑ check payable to *Med Chi* ❑ Visa ❑ Mastercard

Card# _____ Expiration Date _____

Signature _____

Return this form to:

Med Chi Communications Department
1211 Cathedral Street
Baltimore, MD 21201-5585

You may fax your registration to 410-547-0915 or phone your registration by calling Lori Robinson or Vivian Smith at 1-800-492-1056 or 410-539-0872.

Telephone Messages

During the meeting, messages may be relayed to participants by calling 301-985-7300.

Hotel Reservations

The University of Maryland University College Conference Center offers comfortable accommodations complete with color cable television, telephone, private bath, and desk. Guests at the Conference Center can also enjoy a wide variety of recreational facilities including an 18-hole golf course, tennis and racquetball courts, weight rooms, swimming pools, and jogging paths.

Med Chi has reserved a limited number of rooms at a special group rate of $65.00 for a single occupancy room and $80.00 for a double occupancy room.*

To receive this special group rate, you must make your room reservation by **March 29, 1993**. To make a reservation call 1-800-727-8622 and give Med Chi's group number: G2568.

* Tax and incidentals not included.

Miscellaneous

Contact Joan Mannion at 1-800-492-1056 or 410-539-0872 with questions about continuing medical education sessions.

For general questions regarding the annual meeting, call Betsy Newman at 1-800-492-1056 or 410-539-0872.

Our Pictures Are Worth A Thousand Words.

Case #23

59 year old male, routine physical examination, elevated PSA level of 32. Biopsy under ultrasound revealed undifferentiated carcinoma of the prostate gland.

DIAGNOSIS: Prostatic cancer with capsular perforation and seminal vesicle involvement on the left.

MRI of the pelvis employing an endorectal surface coil performed for staging provides increased resolution and soft tissue contrast to allow detailed imaging of the prostate gland. Axial and Coronal images (1 and 2) reveal extensive involvement of the peripheral zone on the left and moderate involvement on the right (arrows). Capsular perforation and seminal vesicle involvement are also present on the left. Axial image (3a) demonstrates normal seminal vesicles (3b) carcinoma of the prostate gland with an intact capsule (arrowheads).

Ultrasonic guided biopsy of the prostate gland is the procedure of choice for diagnosing carcinoma of the prostate gland. MRI evaluation with the endorectal surface coil is the procedure of choice for staging prostate gland cancer. Staging of the neoplasm is important in determining appropriate therapy. MRI, in addition to staging of the gland itself, is excellent for evaluation of the pelvis and retroperitoneal area, detecting adenopathy and osseous metastatic disease.

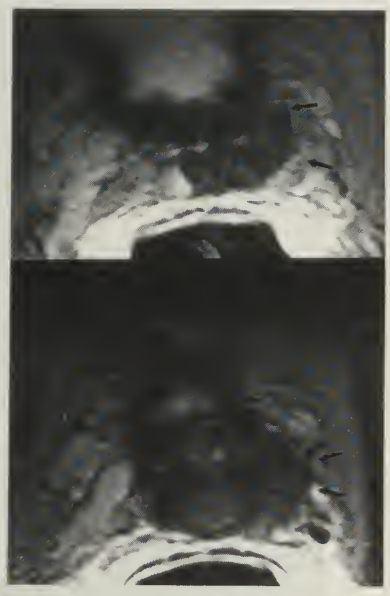


IMAGE 1



IMAGE 2

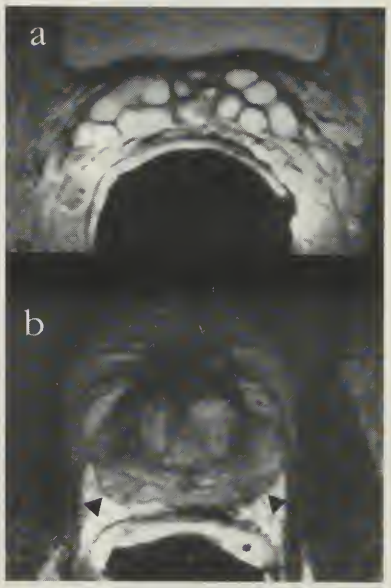


IMAGE 3

At Drs. Copeland, Hyman & Shackman, P.A. we are proud of our high resolution, state-of-the-art imaging. We look forward to consulting with you on any diagnostic imaging procedure in order to best serve you and your patients in the most expeditious and economic manner.

We provide convenient evening and weekend hours at all MRI locations, double readings for quality assurance, and FAX capabilities for delivering reports immediately.

You work hard to gain your patients' trust and confidence. At Drs. Copeland, Hyman & Shackman, we'll help you keep it.

Drs. Copeland, Hyman & Shackman P.A.

MRI Examinations available at:

Pomona Square	White Square Imaging Center	Harford Imaging Center
1700 Reisterstown Rd.	9105 Franklin Square Drive	104 Plumtree Rd./Bel Air
(410) 486-8830	(410) 574-8880	(410) 515-4000

Magnetic Resonance Angiography (MRA) is available at all locations.

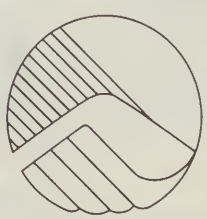
COMING OUT OF THE DARK

Med Chi's Physician Rehabilitation Committee deals with the substance abuse and mental health problems of Maryland physicians, with a confidential and nondisciplinary focus...Addiction, Marital/Family Conflicts, Psychiatric Illness, Organic Impairment, Physical Handicap...If these problems exist, we can help find the solution. Call us.

The Physician Rehabilitation Committee of Med Chi is available to all Maryland physicians, and their families. The Committee is NONDISCIPLINARY and information is kept CONFIDENTIAL. If you, a colleague, or family member is in need of our services call (410)962-5580 or call toll free (800)992-7010, or leave a message 24 hours a day, 7 days a week at (410)727-1020.

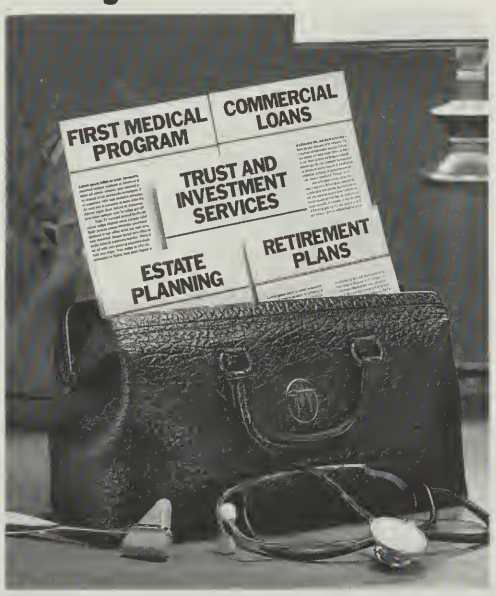
HELPING IS OUR BUSINESS...All donations to the Physician Rehabilitation Committee are used for the delivery of services to Maryland physicians in need of help. If you wish to help further the work of the Committee through a tax deductible donation send your check to: The Medical and Chirurgical Faculty Charitable/Educational Foundation, 1204 Maryland Avenue, Baltimore, Maryland 21201 Please note on your donation: "Physician Rehab"

Medical and Chirurgical Faculty of Maryland



Physician Rehabilitation Committee

We provide "proper treatment" for every physician.



At First National Bank of Maryland, we know that time is extremely valuable to a physician. That's why we have made a major commitment to take care of **all** your financial needs with speed... accuracy... and a high level of personal service.

As part of our First Medical Program, we offer you a comprehensive package of customized services designed to satisfy your professional... and personal... financial requirements. Plus an experienced business banker who will work closely with you at your home or office.

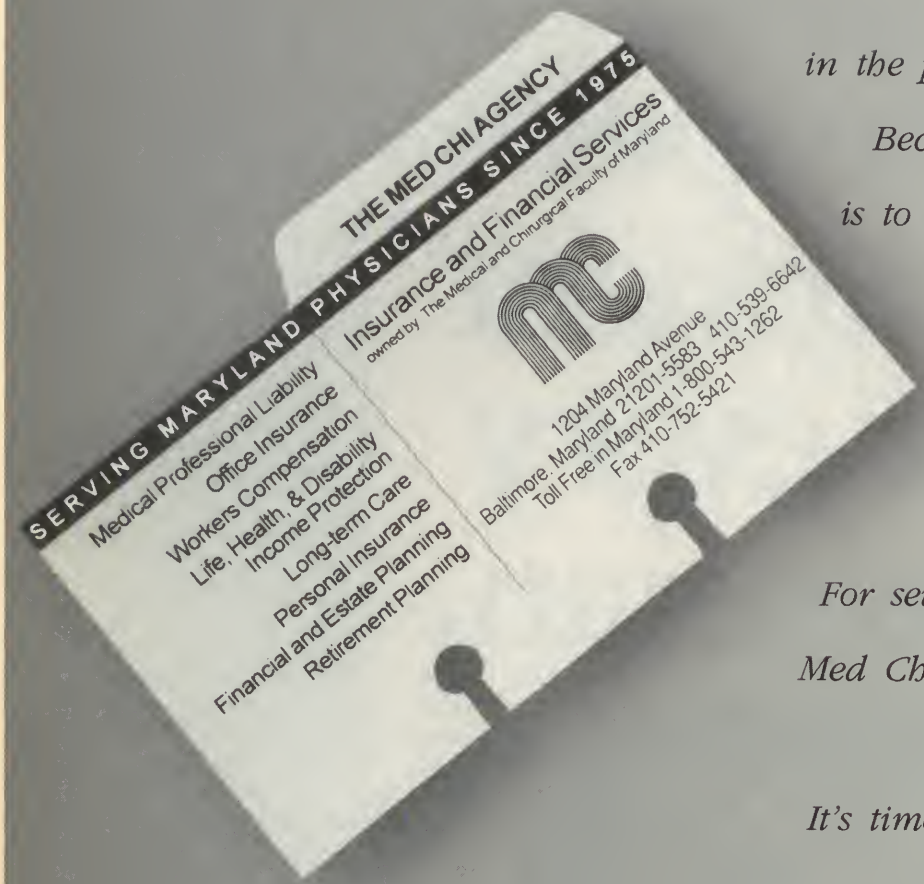
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Baltimore County: 832-7854/**Lower Eastern Shore:** 548-7200
Upper Eastern Shore: 479-3130/**Frederick County:** 698-7856/**Harford County:** 836-5700
Howard/Carroll County: 964-6808/**Montgomery County:** 840-6300
Prince Georges County: 952-5600/**Washington County:** 790-6800



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The Only Card You'll Ever Need

The Med Chi Agency, 1204 Maryland Avenue, Baltimore, Maryland 21201
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LETTERS TO THE EDITOR

Tobacco: Schools and magazines

This is an update on Tobacco-Free news for 1992. We are pleased to announce that this past June, the Maryland State Board of Education passed a regulation (almost unanimously) banning **all** smoking in public school buildings. This was then reviewed by the attorney general and became law in November 1992. It takes effect in September 1993. Maryland, the cancer capital of the United States, thus becomes the first state to ban smoking in public schools by action of the State Board of Education. Seven states now have smoke-free schools through legislative action. It is expected that the state teachers' union, headed by an avid smoker, will attempt to introduce a bill making smoking a subject for contract negotiations. Needless to say, we consider the issue one of public health, and have faith that the Maryland Legislature shares this view.

We close by once again urging that you ban all journals that contain tobacco ads from homes and offices. The importance of advertising in getting our children hooked on nicotine cannot be overemphasized; the tobacco industry would not be spending ten million dollars per day on advertising if it were not effective. Please note that *Sports Illustrated,* featuring more teenage idols than any other magazine, is the most pernicious of the lot, receiving the largest amount of tobacco money. We must fight this by a boycott until such time as the editors realize their social responsibility.

A happy and smoke-free new year to all.

MIRIAM KLEBANER, M.D.
Tobacco-Free coordinator, Maryland Chapter, American Academy of Pediatrics

No frills insurance needed*

Thank you for the exposé (for me) of Blue Cross/Blue Shield of Maryland in the November 1992 *Maryland Medical Journal.* I have dealt with BCBSM for several years, both as a participating physician and as a subscriber/patient. I know them well. Long have I felt as if I have been treated unfairly, dishonestly, arbitrarily and inefficiently by BCBSM, but stuck with them since while in practice so many patients in my area (Salisbury, Maryland) had BCBSM or nothing, and (as a subscriber), since stopping practice because of Parkinson disease, I could not get any other insurance for myself. Now, I learn that they spent my lifetime premiums on ball games, horse races, and country clubs! The lifetime premiums of the entire Med Chi group and others have been squandered on excessive salaries, perks, and misguided, if not dishonest or illegal, business ventures. Doctors can be held liable for malpractice; why not insurance plans that are supposed to be public service, and not-for-profit? Why not hold boards of directors liable for negligence?

It is an outrage. I have been cheated coming and going and will renew my efforts to get out of BCBSM and get some other insurance. I hope Med Chi will do the same.

Once again, greed is shown to be the cornerstone of the failure of our health care system. Doctors' greed, evidenced by uncompromising high fees, refusal to treat or even see the poor, and profiteering self-referral through ownership

of health care services, combined with a rapacious insurance industry is leading to changes very few (other than patients) will like.

I propose that the Med Chi Faculty of Maryland assume leadership in the reformation of a new physicians' plan for covering basic health care. Something simple, with no frills—just basic care, with emphasis on prevention. Doctors of Maryland should stop dealing with defrauding insurance companies and take care of the people.

C. HERSCHEL KING, M.D.
Ashland, Oregon

*See update on BCBSM on page 146.

A heart-rend(er)ing memorial*

Here's to Dr. Hookman
  Who, under the sly influence
Of that famous Dr. Osler,
  Tried to fool us with a joke—
Or, maybe not, maybe so,
  Was rendered by a wayward magazine editor.

The veil of the temple was rent
  And the vale of tears is rent,
Except for the blessed homeless,
  Those who on their streetside fires
Render rent hearts, kidneys, muscle,
  The galled eyes of oxen,
Into a stew.

To those who know not whereof I speak
  Be patient, read your *MMJ*.
Pay attention to all the footnotes, every one
  Until at page two and one thousand
The minute stimulus of this minute poem
  Is found.
Poor Dr. Osler, whose memorial was so hot aflame
  That he rendered many a heart that day
On a spit of would.
  (O! to follow in the great one's tread!)

WILLIAM A. ANDERSON
Towson, Maryland

*Sir William Osler—Contrasts between the saint-like legend and the rough-edged man. *Md Med J* 1992; 41:1002, footnote k. ■

Update on Blue Cross and Blue Shield of Maryland

The editor's interview with Frank Gunther, Jr., chairperson of the Board of Directors for Blue Cross and Blue Shield of Maryland (BCBSM), in November 1992, included a listing of allegations made by the US Senate Subcommittee on Permanent Investigations. The November and December 1992 issues of the *MMJ* listed actions taken by BCBSM in response to these charges.

As part of an ongoing update to keep members advised about this issue, below is a summary of activity involving BCBSM since December 18, 1992.

December 18

The *Washington Post* reports that BCBSM spent $2 million on lawyers, accountants, and consultants to prepare for the hearing before the US Senate Subcommittee on Permanent Investigations. Venable, Baetjer, and Howard, a Baltimore-based law firm, received $700,000 of that money. Benjamin R. Civiletti, a former United States attorney and partner in the firm, represented BCBSM during the hearings.[1]

January 7

Maryland's insurance commissioner, John A. Donaho, issues an order to block the payment of retirement packages to two BCBSM executives. Donaho issued the order because he claims BCBSM failed to indicate the exact amount of the retirement packages to be paid to former BCBSM Chief Executive Carl J. Sardegna and current Senior Vice President Fred M. Gloth, Jr.[2] The Board of Directors of BCBSM has testified before both the Maryland House and Senate that the retirement packages are currently under review by outside counsel to determine what BCBSM is legally required to pay.

January 9

Commissioner Donaho announces he will seek more power to regulate BCBSM through legislation that would give the insurance commissioner unlimited access to the insurer's accounting records and give him the power to prevent BCBSM from opening new businesses. Although, Commissioner Donaho's proposal does not have the support of Governor Schaefer, Casper R. Taylor, Jr., chairperson of the House Economic Matters Committee, announced that he plans to introduce legislation that would place more stringent requirements on Maryland insurers. In a *Baltimore Sun* article, BCBSM said it supports the commissioner's efforts to more closely examine an insurer's financial condition.[3]

January 13

BCBSM issues a special report to its customers from William A. Beasman, Jr., interim chief executive officer, and Frank A. Gunther, Jr., chairperson of the BCBSM board. The report, which is a model for a quarterly report to customers to be initiated during 1993, includes findings by a special committee appointed by Mr. Gunther to review the company and its operations. The committee concludes

- BCBSM is financially solvent, and
- BCBSM does not have a liquidity problem.

The report breaks down the committee's findings into five areas:

Finance

Under finance, the committee concludes that "the company's financial information and operations are not as controlled as they need be." The committee report states that BCBSM will take several actions to address this problem including review the lease for the Owings Mills building and require detailed financial reports.

Expenses

With regard to expenses, the committee concludes, "Greater expense control is needed." BCBSM's actions to resolve this problem include reducing "1993 administrative expenses to a level below that in 1992"; bringing "executive compensation levels in line with practices of Blues plans of similar size"; reporting "compensation levels of top executives to the public each year"; and creating a "policy regarding the use of outside consultants, including outside legal counsel."

Service

The committee concludes there is "insufficient training for employees in the service areas...." To correct this problem, BCBSM will improve service to customers and centralize and coordinate training of claims personnel.

Communications

The committee also found that there is "insufficient and inconsistent communication." To address this,

BCBSM will develop a 60-member employee group that will create a vision statement for the company and "assist in developing the mission and goals of the company."

The board of directors

Finally, the committee reaffirmed the board's role as a policymaking body and that it should not be involved in the BCBSM's daily operations. The committee added, however, that there is "need for increased oversight of BCBSM's operations," and there needs to be greater accountability of the senior management and board of directors. The report states BCBSM will reduce compensation for board members to $4,000 annually and to $400 for each meeting they attend. The report notes that this figure is below the national average for BCBS plans of similar size. The board will also require more detailed information from senior management. [4]

January 15

The *Baltimore Sun* reports that BCBSM is auditing its lease payments for its Owing Mills headquarters because BCBCM's payment schedule for the property is up to $30 million more than is required by its lease. The article reports that the increase is due to a provision in the BCBSM contract with the Rouse Company that provides for an automatic increase in lease payments to compensate for inflation. Martin D. Klenke, BCBSM's director of finance, stated that the audit was routine, and BCBSM will renegotiate the financing of the contract with the Rouse company later this year.[5]

January 16

BCBSM signs a letter of intent with Electronic Data Systems Corporation (EDS), which would allow the company to manage and enlarge BCBSM electronic health claims network. According to the *Baltimore Sun*, EDS would take over BCBSM's Lifecard, a subsidiary company. Before the agreement is finalized, however, the contract must meet the approval of BCBSM's Board of Directors.[6]

January 20

A *Baltimore Sun* article examines the "precarious role of consultants to BCBSM." The article describes how consultants hired by BCBSM did not accurately present the company's financial condition. In an examination of a number of BCBSM's consultants ranging from Towers Perrin, Arthur Andersen and Co., and Legg Mason Wood Walker, Inc., the article scrutinizes the use of special accounting rules and exaggerated assets in obtaining information for consultants' reports.[7]

January 23

William A. Beasman, Jr., acting chief executive of BCBSM, requests Fred M. Gloth to delay retirement and help with the day-to-day operations of BCBSM. Mr. Beasman cites in a *Baltimore Sun* article that one reason for asking for the delay in Mr. Gloth's retirement was because much of the top management has resigned from BCBSM and Mr. Gloth's knowledge of the company is "invaluable."[8]

January 27

The Health Care Financing Administration (HCFA) warns BCBSM that it failed to meet minimum standards for payment of claims for Medicare Part B. HCFA tells BCBSM that they must improve quality in the areas of claims processing, quality assurance, and customer service. HCFA notes that BCBSM failed to meet its standards which include a maximum 10% error rate on claims processing and a 1.5% maximum error rate on overpayments or underpayments. BCBSM has until April 30, 1993 to make improvements. If the insurer fails to meet HCFA's requirements, HCFA may not renew its Medicare contract with the insurer. BCBSM states that it will correct the problems, which stem largely from the installation of a new computer system in October 1992 and the simultaneous implementation of the RBRVS payment process. BCBSM says it has already met HCFA requirements for claims processing and hopes to solve other problems with HCFA by the end of February.[9]

February 3

The House Economic Matters Committee holds a hearing on two bills designed to place more stringent requirements on BCBSM. During the hearing, BCBSM Senior Counsel John A. Picciotto said that the requirement for 50 persons inside BCBSM to be responsible for reporting the company's insolvency to regulators could be subject to abuse. He also stated that those persons in the group who have no financial expertise would not be able to accurately assess the company's financial condition. The bills require two consumers to sit on the BCBSM Board of Directors and increase civil penalties for members of the board from $1,000 to $5,000. For officers of the company, fines would be increased to $50,000.[10]

February 5

Med Chi arranges a meeting with top executives from BCBSM to allow Med Chi physician leaders and BCBSM executives to exchange information about current insurance issues. Results of the meeting, which is scheduled for February 24, 1993, will be reported in a future issue of *MMJ*.

February 6

Following a January 28 meeting, BCBSM Board of Directors Chairperson Frank A. Gunther announces that BCBSM will postpone a decision on entering into a contract with EDS until it receives an "objective" expert opinion. Mr. Gunther states that the board will now meet monthly rather than eight times a year, so that board members can monitor finances more closely. Fred M. Gloth, Jr. will retire February 14. In a comment to the *Baltimore Sun*, Mr. Gloth said he intends to stay on and help with daily operations without pay.[11]

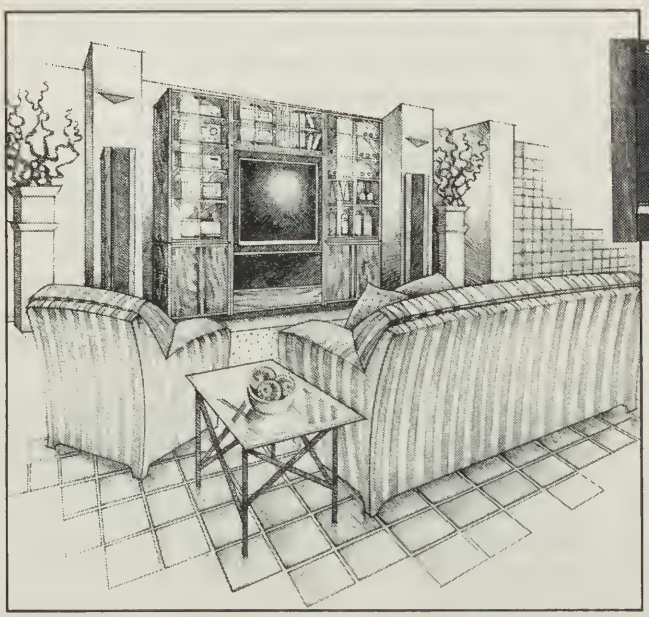
February 17

BCBSM announced the appointment of William L. Jews, a hospital executive, as the new CEO. Mr. Jews graduated from Johns Hopkins University in 1974 with a degree in social and behavioral sciences. After graduation, he worked as a planning official for the University of Maryland and subsequently ran Lutheran Hospital and the Liberty Medical Center. In his new position, he will earn between $400,000 and $500,000—average compensation for a Blues plan similar to Maryland's—although the exact mix of base pay and bonus dollars has not been established. Chairperson Gunther said that Jews "is the medicine we need," as he has over 15 years experience tackling finance, personnel, and political issues with aplomb.[12]

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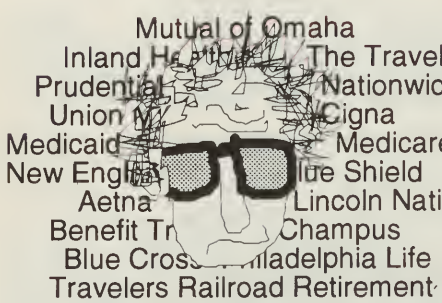
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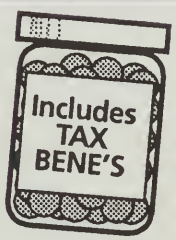
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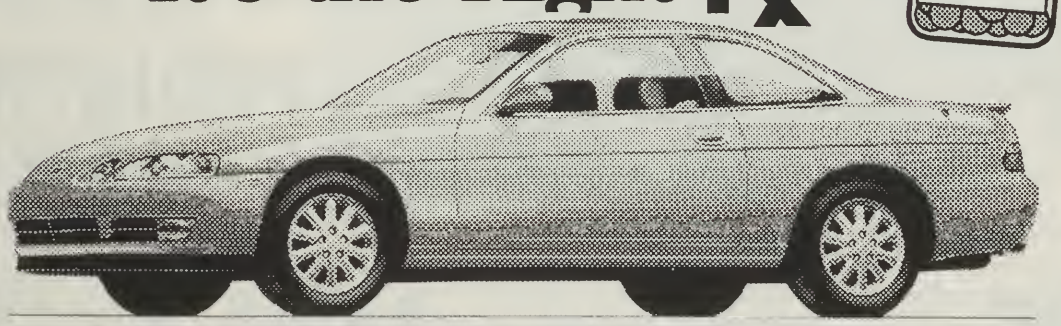
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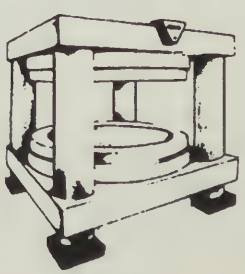
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Combined dopamine and serotonin agonists: A synergistic approach to alcoholism and other addictive behaviors

Pietr Hitzig, M.D.

ABSTRACT: *Successful phentermine and racemic fenfluramine treatment of 150 obese patients led to the use of this therapy in 12 alcoholic patients. Eleven of 12 consecutive patients, most within hours, reported a total loss or marked decrease in alcohol craving. Their reported consumption of alcohol ceased or decreased markedly. The hypothesis is proposed that this treatment is successful because of the dual and balanced increase in the bioavailability of the neurotransmitters, dopamine and serotonin, in the* nucleus accumbens. *The prospect is raised that cocaine, nicotine, narcotic, and amphetamine addiction, as well as various presentations of obsessive compulsive behavior, may also respond to dual aminergic agonists. The need for controlled studies to confirm these findings is clear.*

Dr. Hitzig is an internist in private practice in Towson, Maryland.
Reprints: *Pietr Hitzig, M.D., Physicians' Pavilion, 6565 North Charles St., Towson, MD 21204*

The author has treated 150 obese patients with conjointly administered racemic fenfluramine hydrochloride, a serotonin agonist, and phentermine hydrochloride, an amphetamine-like dopamine agonist. Significant weight loss has resulted, the adverse effects have been minimal, and the drop-out rate has been less than 20%.

To test the hypothesis that combining these same aminergic medications may also synergistically control alcoholism, the author began testing a similar protocol on 12 patients who used alcohol heavily. The initial dose of fenfluramine was 80 mg daily in the alcohol study and 20 mg in the obesity study. The daily starting dose of phentermine was 30 mg in both studies. Eleven of 12 consecutive patients reported a marked or total decrease in their alcoholic craving and consumption, usually in less than 24 hours.

Representative case histories

Ms. A, a successful non-obese executive in her late twenties, is the progeny of two alcoholics. In addition, there is a strong family history of depression, alcoholism, and suicide. From the age of 7 to 17, her father sexually abused her. For at least the previous 10 years, Ms. A has had a

stormy alcoholic history and reported that for years she had been binge drinking, despite attendance at Alcoholics Anonymous (AA) meetings. An inpatient on at least five occasions, her marriage was in dissolution. Her employers, understandably, wondered whether they could continue to employ her. Prior to the prescribing of the aminergic medications, Ms. A reported that she suffered from ever-present alcohol cravings and obsessional ideation relieved only by alcohol.

Ten weeks after she started the medications, she reported "absolutely no craving." She continues to attend Alcoholics Anonymous (AA) meetings, and marvels at her voluntary alcoholic abstinence and lack of craving.

Professor B, a college educator in his early fifties, initially came to the author's office several years ago for treatment of refractory hypertension. When questioned, the patient candidly discussed his alcohol history of more than one pint of vodka nightly. Up to the time of his interview, he asserted he had no insight into the possibility of alcoholism. He readily abstained from alcohol, lost 30 pounds, and became normotensive. Over the next two years, he gained weight and once again had labile hypertension. He frankly commented that his alcohol craving had led to a resumption in drinking.

After beginning treatment with the conjointly administered aminergic agonists, the patient once again started to lose weight. The weight loss, however, was not at the rate expected for someone of his age and weight. When the fenfluramine dose was increased to 80 mg, he reported that he lost his desire for alcohol, and his weight loss became precipitous. At 10-week follow-up, he reported that he had not consumed any alcohol for the entire period.

Mr. C, a patient in his early sixties, was started on the medications. After eight weeks, he also indicated that he had completely lost his craving for alcohol and was no longer drinking. He stated that if he drank at all, he limited it to a can or two of beer. He has started a support group designed to help people who are beginning the protocol.

Mrs. C, the patient's wife, interviewed alone, reported being happy with the course of treatment. She stated that the patient was a "new man," far more energetic and much less irritable.

Discussion

The addictions of alcohol[1] and food are under increasing pharmacologic attack. Against alcoholism are arrayed various re-uptake inhibiting serotonin agonists[2] including fluoxetine[3] and citalopram.[4] In addition, Krasner[5] and colleagues have studied fenfluramine, a serotonin agonist but not a classical serotonin re-uptake inhibitor. These drugs alone cause significant but modest decreases in alcohol consumption.

Against hyperphagia, the front is even more advanced. Over the last 10 years, Hoebel[6–8] and his associates at Princeton have integrated experiments done elsewhere with their own elegant work. Their model will continue to guide many researchers to rewarding areas of experiment. Weintraub and colleagues reported in 1984[9] and in 1992[10] that together, fenfluramine and phentermine act synergistically against food craving and obesity. They stated that this combination "capitalized on pharmacodynamic differences, resulting in equivalent weight loss, fewer adverse effects, and better appetite control." Weintraub et al continued the use of these medications for three years, and the results strongly suggest that obesity can be managed as a chronic illness without untoward medication-induced side effects or tachyphylaxis.

Of invaluable benefit to neurophysiologic research have been animals with electrodes placed in the medial forebrain bundle of the brain, who have been trained to self-stimulate themselves. When the animal presses a pedal, dopamine is released and the animal is thereby rewarded. Many studies using this procedure as a model for addictive behavior have been performed over the years. A recent study by Olds et al[16] showed that while racemic fenfluramine by itself decreased the rate of self-stimulation, combining fenfluramine with amphetamine was far more effective. These chemicals, administered together, abolished lever pressing for up to three hours. The researchers believe that their findings support a dopamine-serotonin interaction in self-stimulation behavior [and the author suggests a possible interaction in addictive behavior].

There are many similarities between primary obesity and alcoholism. They include the following.

- The ingestion of either food or drink increases dopamine and serotonin in the *nucleus accumbens* (NAC).[6,12–15]
- Craving and loss of control in alcohol abuse and dependency may have a neurophysiologic basis within basal ganglial/limbic striatal and thalamocortical neuronal systems. These same dopaminergic systems are involved with neuronal modulation of hunger and satiation.[16]
- Both food and alcohol cravings are modestly ameliorated by serotonin agonists.

In normal subjects, dopamine and serotonin production decrease from waking to sleep.[17] The author postulates that the non-addicted, or normal subjects, reverse this dual amine decline by consuming their main meal of the day after sunset. If they wish, alcohol consumption and sexual relations will further briefly maintain high levels of extracellular serotonin and dopamine in the NAC. Moderate alcoholic or hyperphagic, individuals however, with greater aminergic deficits, have to exaggerate normal hedonistic evening activities to maintain normal euphoric levels. Individuals who are morbidly obese, bulimic,[18] or severely alcoholic have, unfortunately, inadequate aminergic production in the NAC. They try to control their resulting dysphoria by excessively eating or drinking earlier in the day. Unable to stimulate aminergic production sufficiently, these descendants of Tantalus rarely reach satisfaction.

The question of whether an addictive problem should be managed with drugs derived from amphetamines cannot be ignored.[14] It should be noted that not one patient in either of the author's treatment groups has developed amphetamine tolerance, let alone addiction. Dr. Weintraub and colleagues noted no drug-seeking behavior during their entire study.

There are no reports in the medical literature since 1966 of phentermine substance dependence. Fenfluramine has little potential for substance abuse.[19]

Could these medications, or different ones, be effective against other addictive and obsessive-compulsive disorders? There are many intriguing articles that support this possibility.

- Jimerson and colleagues[20] show that dopamine and serotonin metabolites in the cerebrospinal fluid (CSF) are decreased in patients with bulimia. Fluoxetine and naltrexone together are more effective against heroin addiction than naltrexone alone.[21]
- Pollack shows that fluoxetine alone is effective in about 50% of individuals who are addicted to cocaine and who are also addicted to heroin and participating in a methadone program.[22]
- Direct nicotine stimulation of the NAC causes a rapid *in situ* increase in dopamine bioavailability.[23–25] Damsma[26] believes that the mesolimbic dopaminergic system is a substrate for the reinforcing properties of chronically administered nicotine.
- Sellers[2] makes the point that serotonin-enhancing animal experiments lead to a decrease in self-administered "ethanol, morphine, cocaine (but not in all studies), and amphetamines."
- Di Chiara[27] forthrightly states that all "drugs abused by humans (e.g., opiates, ethanol, nicotine, amphetamine, and cocaine) increased extracellular dopamine concentrations in ... the NAC."
- Finally, imipramine, the stereotypical tricyclic, does not increase synaptic dopamine concentrations in the mesolimbic system nor does it suppress drug or food self-administration. Fenfluramine, however, and presumably the so-called "pure serotonin re-uptake inhibitors," mildly increase dopamine bioavailability at the NAC.[28,29]

One can speculate that serotonin re-uptake inhibitors modestly lessen most drug and food cravings as a result of this dual aminergic influence. If that supposition is correct, one can then postulate that with the addition of phentermine or another major dopamine agonist, other substance cravings, as well as obsessive-compulsive behavior disorders,[30,31] will be more effectively addressed.

These drugs are not meant to replace other modalities. Programs such as Alcoholics Anonymous, behavior modification, and many others, freed of having to deal with the craving that so often leads to recidivism, could then focus on the other complex issues of dependency and conditioning.

These data are only preliminary. Controlled studies must substantiate that this consecutive series of successfully treated alcoholic patients is clinically significant. Animal and human clinical data do support the author's speculations and results. The serious morbidity and mortality resulting from substance addiction and extreme forms of obsessive-compulsive behavior force every primary health care provider to decide when to initiate therapy.

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Acknowledgments

The Professional Arts Pharmacy in Catonsville, Maryland searched out both generic fenfluramine and phentermine, not an easy task, and triturated the two powdered chemicals with hydroxypropylmethyl cellulose (45 milligrams HPMC/#1 capsule). The use of generics holds the maximum daily cost to less than 80 cents. Dr. Reginald A. Davis has reintroduced me to the complexities of the mesolimbic system. Ms. Debra Peters of the Greater Baltimore Library has responded to importunate demands and the Board of Directors of the Hospital for the Women of Maryland has been extremely supportive. ■

Guest Editorial

Medications to treat alcoholism?

Alcohol dependence is one of the most preventable and treatable public health problems in our society. Even though existing treatments of alcoholism can be effective, they are not effective in everyone and often result in abstinence or nonhazardous drinking for only a short time. Hence the observations by Dr. Hitzig that the combination of fenfluramine and phentermine decrease alcohol craving and alcohol use and may therefore constitute a treatment of alcoholism are important. Medications offer one of the most likely ways to improve the treatment of alcoholics. Naltrexone, fluoxetine, and ondansetron, among others, have been shown to have a potential role in treating alcoholics.[1–3]

The author's observations are particularly interesting because they have considerable theoretical support from preclinical behavioral pharmacology studies. Pharmacological agents that increase serotonin (5-HT) in the brain can decrease alcohol consumption.[4,5] Most also decrease food intake. Fenfluramine is a racemic mixture of a drug that releases serotonin in the central and peripheral nervous system and inhibits its re-uptake into the neuron. Studies with its d-isomer (dexfenfluramine) have shown that the consequence of this is that 5-HT concentration increases at the receptor sites and that alcohol consumption decreases in laboratory animals.[4] Serotonin uptake inhibitors, such as fluoxetine (Prozac), also decrease alcohol self-administration by rats and have the same effect in patients with alcohol dependence and abuse.[3,4]

Phentermine is an adrenergic compound structurally related to amphetamines. Such agents typically increase dopamine and noradrenaline concentrations at their respective receptor sites in the brain. Dopamine is known to play a role in the self-administration of a variety of drugs, in laboratory animals, including alcohol, cocaine, and heroin.[6]

In the case of ethanol, however, clinical evidence for such a role is not available.

Despite a potential rationale for the synergistic interaction of fenfluramine and phentermine, clinical medicine is filled with great promises that have not been confirmed when controlled clinical trials have been conducted. Disulfiram (Antabuse), the most commonly prescribed medication for alcoholism, was thought for many years to have selective pharmacological effects. Proper clinical trials showed its limited efficacy was due to its nonpharmacological effects on compliance and expectancy. Controlled trials of fenfluramine and phentermine at various dose combinations, compared with each alone and with a placebo. are the next step. Some tolerance to the effects of both fenfluramine and phentermine may occur in the treatment of obesity; hence, whether the effects reported in Dr. Hitzig's patients will be sustained should also be a focus of future study. While an effect on craving or the desire to drink may be important, it will be essential to demonstrate that alcohol consumption decreases irrespective of any effect on the self-report of craving.

There are also likely to be substantial safety issues to be considered in the use of this combination in alcoholic individuals. For example, phentermine has a variety of side effects that might be expected to be more common and more serious in alcoholic patients than in other patients (e.g., palpitations, hypertension, central nervous system stimulation). While phentermine does not seem to have a very high risk of abuse, its pharmacological properties suggest that alcoholic individuals might be more likely to abuse such a medication. Serotonergic agents, particularly in combination with other agents, often cause sexual dysfunction, sleep disturbances, and gastrointestinal system side effects (e.g., nausea, diarrhea). Clearly, careful studies of the acute and chronic interaction of these two drugs in alcoholics are needed.

Because fenfluramine and phentermine have different mechanisms of action, one would normally anticipate that a greater pharmacological effect at lower doses and with lesser toxicity than either medication alone could be achieved. Unfortunately, combination therapy is not popular with pharmaceutical companies and regulatory agencies. Proving that efficacy is greater with the combination than with the individual constituents and identifying a dose combination that will suit all patients proves to be a complex and expensive undertaking. Combination therapy, however, is common place for serious illnesses such as hypertension, asthma, and various mental disorders. Alcoholism certainly qualifies as a serious disorder and one where single medication therapy has not yet provided consistent therapeutic effects. There are normally few incentives for pharmaceutical companies to develop combination therapy; hence, future studies of this combination would likely need to be sponsored by a national funding agency such as the National Institute on Alcohol Abuse and Alcoholism (NIAAA) or private foundations.

Finally, the least difficult but not inconsequential matter to be settled if this clinical observation is confirmed will be whether to call the new product phenfluramine or fentermine!

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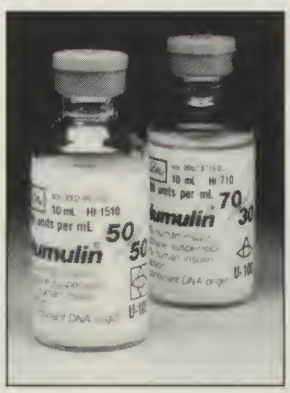
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Chronic polyarthralgia in adults

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ABSTRACT: *Rheumatologists often see patients with musculoskeletal complaints who do not always have symptoms and findings that fit into recognized syndromes. Twenty-two such patients with chronic polyarthralgias, including eight with a positive test for ANA (anti-nuclear antibodies), seen over a seven-year period, did not meet criteria for classification or diagnosis of any recognized rheumatologic syndromes. The mean follow-up since onset of symptoms was 77.5 months (range, 13–276 months). During this time, none of the patients' conditions evolved into any previously recognized syndromes. This report on the study of these 22 patients emphasizes the existence of such patients and comments on their prognosis and treatment.*

Rheumatologists often see patients who do not meet the diagnostic or classification criteria for various rheumatologic diseases, nor do they seem to have any other recognized syndrome. This is particularly true of patients who complain of pain and swelling in their joints, but who, on examination, do not have the usual signs of inflammation—namely warmth, erythema, or swelling. Trying to fit these patients into diagnostic categories may not be in the best interest of the patients or of physicians.[1]

Over a seven-year period, 22 such patients with chronic polyarthralgias, who did not have a known rheumatologic syndrome, have been seen by the author, a board-certified rheumatologist. After adequate evaluation and follow-up, these patients need to know that they have a syndrome with a good outcome; they need reassurance that they do not have systemic lupus erythematosus (SLE), even if they have a positive test for ANA (anti-nuclear antibodies).

Patients and methods

The charts of all patients initially seen between July 1, 1981, and November 1, 1988, were reviewed to identify patients with chronic joint pain of greater than 12-months duration who did not have chronic joint inflammation or a diagnosis of a known rheumatologic disease or syn-

drome. Twenty-four patients fit this definition. Two patients with positive tests for rheumatoid factor of 1:80 (latex fixation) and 62.2 IU (≤ 60 = normal) in the absence of joint swelling were excluded to reduce potential diagnostic confusion with rheumatoid arthritis (RA). Eight of the remaining 22 patients had positive tests for ANA using Hep-2 cells as a substrate. Anti-DNA and anti-Sm assays were negative in all eight patients.

An attempt was made to contact the 22 patients who had not been seen in the previous six months or who had a disease duration of less than 24 months to ask them about their symptoms, medications, and health. All but four patients could be contacted. These four patients had symptom durations of 13, 24, 84, and 126 months from onset of symptoms to last follow-up.

The eight ANA+ patients were compared with the remaining 14 patients using the Wilcoxon rank sum test, since the groups could not be considered to be normally distributed.[2]

Results

Of the 22 patients with chronic polyarthralgias seen between July 1, 1981, and November 1, 1988, 21 (95%) were female. Nineteen of the patients (86%) were white; the other three were African-American. The patient population from which these patients were selected was 75% female and 69% white. There were no statistically significant differences in age of onset, the duration of symptoms or follow-up, or distribution or type of joint symptoms between the ANA-positive and ANA-negative patients.

The mean duration of symptoms from onset to last follow-up was 77.5 months (range, 13–276 months). By necessity, these numbers represent approximations since some patients reported their onset as "in childhood" or "more than 10 years ago." Only two patients had a duration of symptoms less than 24 months. The mean age of onset was 32.1 years. One patient had an onset at age 10, 16 had an onset between age 11 and 39, and the remaining five patients had an onset between age 40 and 50.

The patients reported symptoms in 2 to 16 joints with a mean of 8.5 symptomatic joints (**Table 1**). Joint groups—MCP (metacarpophalangeal), MTP (metatarsophalangeal), or IP (interphalangeal)—were counted as one joint if unilateral and two if bilateral. Four patients reported arthralgias only, including the one male who had symptoms only in his PIP (proximal interphalangeal) joints bilaterally. The remaining 18 patients all reported having had signs of inflammation. Examination, however, rarely confirmed these subjective complaints even when the patients believed they were currently present. Three of these 18 patients had no abnormal joints on examination, and six of them had pain on palpation or motion of the joints in one to eight joints (mean of 3.6 joints) with no evidence of inflammation. The remaining nine patients had warmth, erythema, or swelling in one to six joints (mean of 2.4 joints). Not all of the involved joints were inflamed at the same time.

The most commonly involved joints were the MCPs and knees, wrists and PIPs (**Table 2**). Five patients reported having some symptoms in the axial joints, and three others had tenderness on palpation somewhere in the spine or over the sacroiliac joints. Involvement of the small joints of the feet was unusual.

The intensity of symptoms varied. Four patients had chronic pain but did not take analgesics for the discomfort. All of the patients had adequate relief of their symptoms with nonsteroidal anti-inflammatory drugs (NSAIDs). None of those patients who were employed had stopped working because of their joint symptoms.

Only seven patients had radiographs, most often because of severe symptoms unresponsive to NSAIDs, to determine if erosive changes consistent with RA had occurred. This would indicate that more aggressive therapy was appropriate in the absence of a clinical diagnosis of RA. These studies, done within a mean of 43.6 months after the onset of symptoms (range, 8–75 months), failed to reveal any evidence of joint erosion or destruction.

Table 1. Demographics and joint involvement of each patient

Pt. #	Age (onset)	Duration (m)	Joints involved
1	25	118	W,C,D,K
2	30	34	S,E,W,C,S,H,K,A,T
3	28	30	AS,W,C,A
4	40	13	C,P,A
5	24	74	S,W,K
6	33	115	AS,S,W,C,P,D,K,A
7	20	126	AS,W,H,K
8	27	15	S,E,P,D
9	39	73	S,E,W,C,P,D,K
10	35	84	AS,C,P,D,T,DF,PF
11	50	17	C,P,D,K
12	32	74	P
13	32	100	AS,W,C,P,K,A
14	47	51	E,W,C,P,T
15	42	67	S,E,W,C,P,D,H,K
16	28	52	S,E,D,A,T
17	40	75	E,W,C,P,K,A
18	25	24	S,K
19	31	148	W,C,P,H,K
20	36	97	W,C,P,K,A,PF
21	32	43	C,K,T
22	10	276	AS,E,K
Mean	32.1	77.5	

*Duration is from onset to last follow-up

AS=axial skeleton, S=shoulder, E=elbow, W=wrist, C=MCP, P=PIP of hands, D=DIP of hands, H=hip, K=knee, A=ankle, T=MTP, PF=PIP of feet, DF=DIP of feet.

None of the patients demonstrated joint laxity on examination. One patient developed flexion contractures of her knees and elbows without having had inflammatory episodes in those joints. Otherwise, this syndrome does not seem to cause permanent damage to articular structures.

All of the patients were, by exclusion, rheumatoid factor negative, with an average of 40.3 months (range, 1–276 months) between onset of symptoms to last rheumatoid factor assay. Eight of the 20 patients tested had a positive (1:40 by Hep-2 cell) ANA assay with a median titer of the positive results of 1:480 and a mean of 1:730. A speckled pattern was seen in five patients, a homogeneous pattern in one patient, a nucleolar pattern in one patient, and a mixed homogeneous and speckled pattern in one patient. Anti-Ro and anti-La antibody assays were performed in five of the eight ANA-positive and four of the 14 ANA-negative patients, with negative results in all nine cases.

Erythrocyte sedimentation rates (ESR) were performed at least once on 20 of the patients. The mean maximum ESR obtained on any of the patients was 24 mm/hr with a range of 0 to 60. Only four patients had an ESR greater than 20 mm/hr.

None of the patients' syndromes would be classified as RA by the 1987 American Rheumatism Association (ARA) criteria,[3] which require patients to meet four of the criteria for classification as RA (**Table 3**). None of the patients met the 1971 or 1982 classification criteria for SLE, [4,5] each of which also requires patients to meet four criteria. The only clinical criterion other than arthritis present in these patients was Raynaud phenomenon, which occurred in two ANA-positive patients and in one ANA-negative patient. (Since Raynaud phenomenon is included only in the 1971 list and ANA only in the 1982 list, no patient had more than two criteria from either list.) None of the patients met the major criterion—sclerodermatous skin changes—of the ARA scleroderma criteria.[6] None of the patients had signs or symptoms (e.g. erythema chronicum migrans or sausage digits) with specificity for known arthritic or connective tissue diseases.

Two patients complained of sicca symptoms, but neither patient had dry eyes or mouth on initial examination nor any parotid enlargement or lymphadenopathy. Both had normal joints on examination. Therefore, Sjogren syndrome was not the suspected cause of their arthralgias. None of the remaining patients had sicca symptoms or dry eyes or mouth on examination.

Eight of the patients had pain and/or tenderness in the spine or sacroiliac joints. None of them had typical symptoms of inflammatory spondylitis (morning stiffness or improvement with exercise) or nonaxial findings of a spondyloarthropathy (nontraumatic enthesopathy, sausage digits, keratodermia blennorrhagica, etc.). None of the patients had psoriasis or symptoms consistent with inflammatory bowel disease.

None of the patients ever experienced an episode of podagra. Only one patient, a 41-year-old female, had an elevated serum uric acid of 7.9 mg/dl (normal, 2.0–7.1 mg/dl). None of the patients had what appeared to be the "pseudorheumatoid" presentation of CPPD (calcium pyrophosphate dihydrate) disease.[7]

Fibromyalgia was actively considered prospectively in all 22 patients, but none of them fulfilled the 1990 American College of Rheumatology criteria for fibromyalgia.[8] The mean age of onset went against a diagnosis of osteoarthritis, and with the exception of one patient with bony enlargement

Table 2. Number of patients with specific joints symptomatic or abnormal on examination

Axial spine 8

Upper extremity		Lower extremity	
DIP	8	DIP	1
PIP	13	PIP	2
MCP	15	MTP	6
Wrist	13	Ankle	8
Elbow	6	Knee	15
Shoulder	8	Hip	4

DIP= distal interphalangeal, PIP= proximal interphalangeal, MCP= metacarpophalangeal, MTP=metarsophalangeal

Table 3. Number of ARA criteria met by each patient and ANA titer

Pt. #	1987 RA	1971 SLE	1982 SLE	ANA titer
1	3	2	2	1:2560
2	1	1	2	1:40
3	0	0	1	1:1280
4	1	1	2	1:320
5	0	1	2	1:640
6	1	1	2	1:40
7	0	1	2	1:320
8	2	2	2	1:640
9	0	0	0	<1:40
10	0	0	0	<1:40
11	0	1	1	<1:40
12	0	0	0	ND
13	1	2	1	<1:40
14	3	1	1	<1:40
15	0	0	0	<1:40
16	0	1	1	<1:40
17	0	1	1	<1:40
18	0	0	0	<1:40
19	2	1	1	<1:40
20	0	1	1	<1:40
21	0	1	1	<1:40
22	0	0	0	ND
Mean	0.6	0.8	1.0	1:730*

ARA = American Rheumatism Association, RA = rheumatoid arthritis, SLE = systemic lupus erythematosus, ANA= anti-nuclear antibodies,

* among antibody positive patients

of one PIP joint, none of the patients had any Heberden or Bouchard nodes. Thyroid function, measured in 17 patients, revealed normal values.

Discussion

The patients presented in this study did not fall into any obvious diagnostic group. Despite a female predominance, a mean age of onset similar to rheumatoid arthritis (32 versus 35 years), and joint pain, they clearly did not have RA. These patients did not have a chronic inflammatory arthritis, which is the *sine qua non* of the diagnosis of RA. They had chronic polyarthralgias in the absence of any defined rheumatologic syndrome. Could these patients be similar to groups reported previously as seronegative rheumatoid arthritis or other syndromes?

In one study of seronegative rheumatoid arthritis,[9] "nearly all" the patients had classic or definite RA, and "only a few" had probable RA by the 1958 ARA criteria for RA.[10] In a second study,[11] all of the patients had definite or classic RA by the 1958 criteria. (Because the 1958 criteria were clearly too sensitive and overdiagnosed RA, the ARA adopted the revised criteria.) Using the 1958 criteria, none of the 22 patients discussed in this report could be classified as having classic or definite RA, and only three of the 22 patients presented here could be classified as having "probable" RA. The remaining 19 did not meet even this minimal level of diagnosis. Thus, this group of patients did not seem to have what has been reported previously as seronegative rheumatoid arthritis.

Lawrence and Bennett reported from England an entity they called "benign polyarthritis."[12] They believed that most of the patients had either acute rheumatic fever (ARF) or Still's disease. It is unlikely, given the low incidence of ARF in the United States, that many, if any, of the patients described here had undiagnosed rheumatic fever. None of them had a history of childhood rheumatic fever, symptoms suggesting rheumatic fever, or a significant childhood illness that would suggest Still's disease.

Feigenbaum, Masi, and Kaplan reported on a group of newly diagnosed, younger adult patients with rheumatoid arthritis.[13] Among these patients were 18 who were followed for at least three years, and who, on last follow-up, had no swelling on examination and no erosions on x-ray. At entry, these patients had an average of 6.9 joints with abnormality on examination, with an average of 2.9 swollen joints. Only two of these 18 patients met the 1958 criteria for definite or classic RA, and none were seropositive. While these patients had mild rheumatoid arthritis (based on their lack of inflammation at last follow-up), they all initially had enough inflammatory process to be diagnosed with RA at the onset of their disease. The three patients in the present group with "probable" RA by the 1958 criteria most resemble these 18 patients.

Feigenbaum, Masi, and Schoon further reported, in abstract form, 21 seronegative females with "a chronic peripheral seronegative arthritis syndrome," which they called "arthritis of unknown diagnosis (AUD)."[14] These 21 women had an average of 1.4 swollen joints on initial examination and seemed to be a heterogeneous group. Their major complaint was arthritis rather than arthralgias. Since this group has not been reported in detail, it is not clear if any of these patients were similar to the patients reported on here.

Palindromic rheumatism differs from the syndrome described here in that patients with palindromic rheumatism have episodes of arthritis that last only hours to days, and they are asymptomatic between episodes.[15] They share the lack of damage in the affected joints and a long-term maintenance of normal function in these joints. Patients with fibromyalgia have peripheral arthralgias as a predominant symptom;[16] the patients reported here did not meet criteria for fibromyalgia. For unclear reasons, fibromyalgia patients and the patients reported here were predominantly female. However, female predominance is common in many rheumatologic diseases such as RA and SLE.

Greer and Panush described a group of patients with a diagnosis of "incomplete lupus erythematosus" (ILE).[17] Patients referred for evaluation of SLE, but who met only two or three of the 1982 SLE criteria, were included in the study. Eighty-two percent of the patients were ANA positive, and 47% had arthritis. Cutaneous manifestations were the most common findings of SLE among these patients, with 61% having malar or discoid rashes, or photosensitivity. These patients with ILE may be similar to some of the ANA-positive patients discussed in this paper, although cutaneous manifestations were absent in the latter group.

The use of "incomplete lupus" as a name for the syndrome they described is unfortunate. Greer and Panush explicitly state that they do not regard ILE as a subset of SLE, and only two of their patients developed SLE. But for those who do not read the paper carefully, the connotation of the title suggests that the authors perceive some connection.

These patients who do not meet the criteria for any recognized rheumatologic syndrome remain a diagnostic dilemma. Given that all of the patients got relief from their symptoms with NSAIDs and none of them developed destructive joint changes, one can justify performing only a limited number of diagnostic studies. After a while, patients with obscure diseases will just stop reporting their symptoms to their physician if the diagnostic studies do not lead to therapeutic benefits.[18]

Viral infections, such as parvovirus B19, can lead to chronic arthralgias, but diagnosis depends on demonstrating immunoglobulin M antibodies at the time of onset of symptoms[19] since 60% of adults demonstrate immunoglobulin G antibodies. In the group of patients reported here, the chronicity of symptoms makes associating the symptoms with a particular prior viral infection impossible. HLA-B27 (human leukocyte antigen) testing was not done in these patients since the clinical history for spondylitis (about which all of these patients were questioned, and which was not present in any of them) is as sensitive and more specific than HLA testing in diagnosing ankylosing spondylitis.[20]

Conclusion

The major goal of this paper is to emphasize the existence of patients with chronic arthralgias whose symptoms do not

progress. Such patients, whose conditions do not evolve into previously recognized rheumatologic syndromes, should not be described in terms of other syndromes. Even a positive ANA (with a negative anti-DNA and anti-Sm) should not lead to a diagnosis of lupus.

At a minimum, the connotations of a diagnosis of "incomplete lupus" or "mild lupus" may lead to unnecessary anxiety among patients and their families. This concern prompted Lockshin's *Journal of Rheumatology* editorial in 1989[1] and a more recent one in the same journal in 1991.[21] The latter editorial suggested that physicians should not identify patients with arthralgias and even oligoarthritis and a negative or low-titer ANA by the term lupus.

Patients with these symptoms in the absence of other rheumatologic syndromes should know that although no name exists for their syndrome, other patients have presented with the same symptoms. If patients have had symptoms for several years, the physician can probably give reassurance that, although the symptoms may continue, it is unlikely that they will progress. They need to know that they do not have SLE, even if they have a positive ANA.

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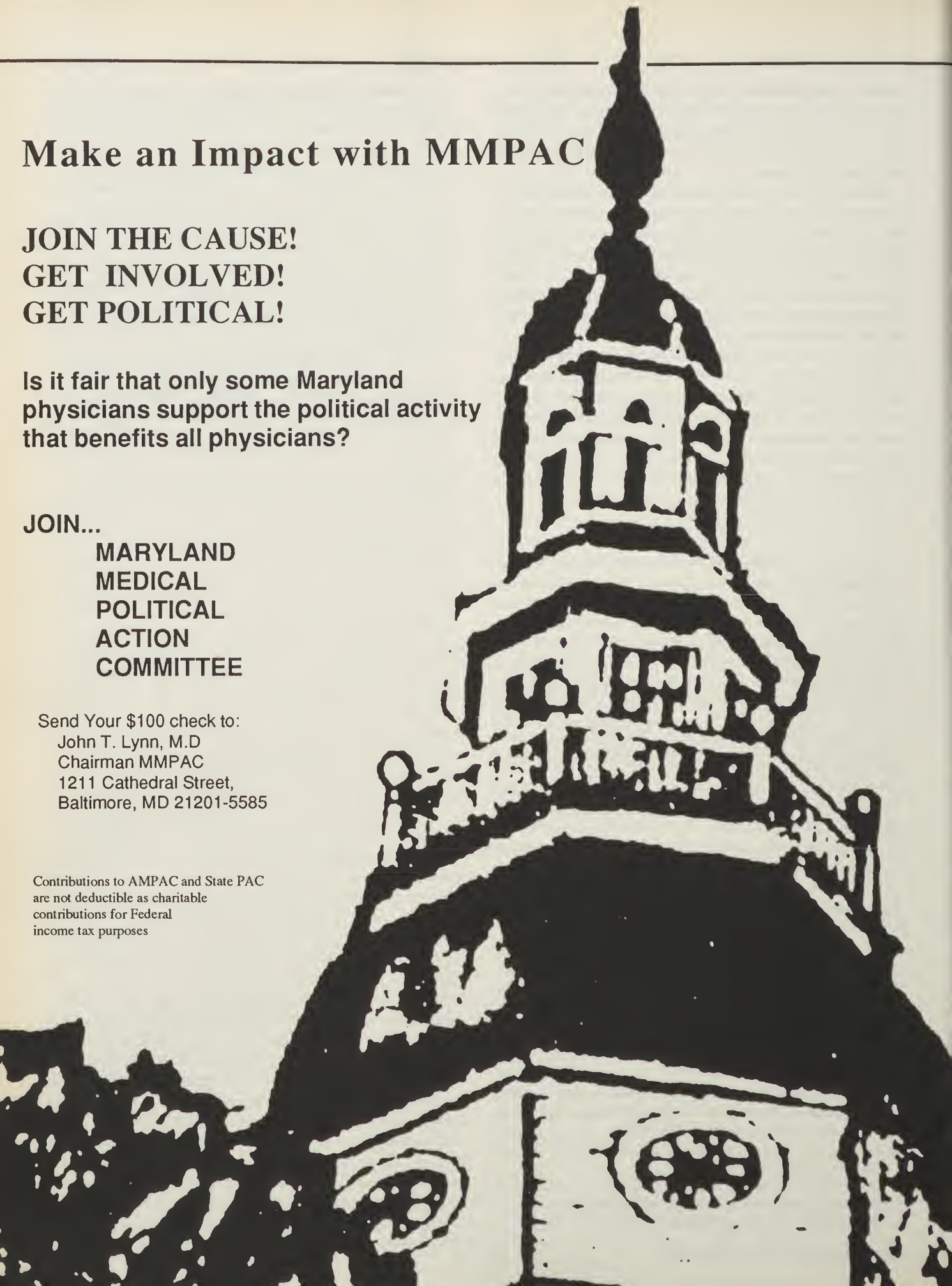
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Lyme disease in outdoor workers on Assateague Island: High tick-exposure but low disease risk

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ABSTRACT: *Lyme disease is endemic to the Assateague Island area. Using a questionnaire and serosurvey, we examined the extent of tick exposure, compliance with recommended Lyme disease personal preventive activities, and risk of the disease in 86 outdoor workers on Assateague Island before and after the summer of 1989. Despite high self-reported tick exposure and relatively long employment durations on the island, there was no evidence of current or past infection with* Borrelia burgdorferi, *the causative agent of Lyme disease. Lyme disease knowledge and use of several personal strategies were high, but compliance with these preventive strategies was not universal. These data suggest that even in this high-risk population, intensive educational efforts are necessary to encourage Lyme disease preventive behavior, but the current level of compliance may have decreased the risk of Lyme disease on the island.*

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The number of Lyme disease cases increased tenfold in Maryland from 1987 to 1990.[1] In 1990, 238 cases met the Centers for Disease Control (CDC) case definition. In 1991, the number of CDC-confirmed cases increased 19% over 1990, with 283 such cases (Maryland Department of Health and Mental Hygiene, 1992). Lyme disease was reported in all Maryland counties in 1991, except Garrett and Washington counties. Five counties—Anne Arundel, Baltimore, Caroline, Cecil, and Queen Anne's—accounted for 53% of cases. The highest incidences of the disease in the state have been found in several counties on the Eastern Shore—Caroline, Kent, and Queen Anne's counties. In Worcester County, which includes Assateague Island, Lyme disease incidence doubled from 1990 to 1991.

Several epidemiologic studies show outdoor workers are at increased risk of clinical Lyme disease or infection with *Borrelia burgdorferi*, its causative agent.[2–5] In a 1988 study, outdoor workers who reported tick exposure on their primary jobs had a fivefold elevated risk of infection as measured by anti-*B. burgdorferi* antibody.[5] The occurrence of Lyme disease in outdoor workers may be a significant problem as an estimated

3.6 million US workers are employed in agriculture, hunting, forestry, and fishing.[6]

We report herein a study designed to assess the occupational risk of Lyme disease in workers at the Assateague Island State and National Seashore Parks in Maryland. Assateague Island is a barrier island located off the Eastern Shore of Maryland. The 37-mile-long island comprises sandy beaches, dune vegetation, pine woodland, shrub thicket, and salt marsh **(Figure).** It contains many wildlife species, such as sika deer, ponies, and mice, known to be hosts for the tick vector. Previous studies have demonstrated that Lyme disease is endemic to Assateague Island and adjacent areas of the Chincoteague National Wildlife Refuge, over the Virginia border directly to the south.[7] Secondary aims of our study were to determine the level of compliance with recommended preventive behavior and the effectiveness of such behavior for preventing Lyme disease.

Methods

Study population and design. The study involved pre- and post-season questionnaires and serosurveys before and after the summer of 1989. The questionnaires included information on demography, employment history, work assignment, participation in leisure activities, tick bite exposure, and Lyme disease symptomatology. All workers (n = 155) on Assateague Island were eligible to participate, but participation was voluntary. Employees were given a presentation on Lyme disease and an overview of the study goals and procedures. A total of 99 subjects (64%) answered the initial questionnaire and had blood drawn for serological analysis in May and June 1989. Of the 99 participants, 86 (87%) took part in the second phase of the study in August and October 1989, which included a second questionnaire and blood sample. The 13 subjects who did not participate in the second screening probably left employment prior to completion of the study.



Figure. Assateague is a 37-mile-long barrier island with sandy beaches, dune vegetation, pine woodland, shrub thicket, and salt marsh.

Laboratory analysis. Serum samples were sent to the state Department of Health and Mental Hygiene laboratory in Baltimore for analysis. The sera were analyzed for anti-*B. burgdorferi* IgM and IgG antibodies (Whittaker Bioproducts, Frederick, Maryland) by enzyme-linked immunosorbent assay (ELISA). A positive result was defined by the laboratory as an ELISA optical density ≥ 1.0.

Data analysis. Data were analyzed with Epi Info version 5.0 and included detailed frequencies, contingency table analysis, and stratified analysis.[8]

Results

Of the 86 subjects who participated in both phases of the study, 25 (29%) were park rangers and 11 (13%) were maintenance workers involved in facilities and equipment management. The remaining subjects represented a large number of job titles, including biologists, lifeguards, naturalists, secretaries, and sewage treatment plant operators. Most subjects were high-risk outdoor workers. Thirty-two (37%) spent all their time outdoors, 19 (22%) spent over 75% of their time outdoors, and 14 (16%) spent at least half of their work hours outdoors. Forty-three subjects (50%) were seasonal employees, 32 (37%) were permanent, and the remainder unspecified. Over two-thirds were employed at Assateague Island for one year or more, and one-quarter were employed for five or more years. Subjects conducted their outdoor occupational and leisure activities in a variety of habitats **(Table 1).**

Fifty-seven subjects (66%) reported ticks attached to their skin during the study period. Of these, 46 (81%) noted one to 10 tick bites, seven (13%) noted 11 to 30 tick bites, and four (8%) noted more than 30 tick bites during the summer season.

Workers reported a wide variety of preventive behaviors **(Table 2).** Workers were more likely to use preventive behaviors at work. However, a significant minority of workers—and for some behaviors, a majority—did not report using preventive strategies. For example, only 15% reported tucking their pants into their socks at work, and only 59% reported applying insect repellant to clothing.

No worker had evidence of current or past infection with *B. burgdorferi*, and no worker seroconverted during the course of the study. All IgG and IgM serologic tests were negative for antibody to *B. burgdorferi*. In addition, no worker developed

Table 1. Distribution of time spent in various habitats by 86 Assateague Island outdoor workers in occupational and leisure activities (summer 1989)

Habitat	Occupational hours None %	1–10 %	11–30 %	>30 %	Leisure hours None %	1–10 %	11–30 %	>30 %
Marsh	54	35	6	5	63	35	1	1
Meadow	81	15	3	1	72	25	1	2
Mowed lawn	45	43	9	2	22	50	21	7
Paved areas	25	49	14	12	84	50	10	6
Sandy beach	23	48	15	14	33	45	17	5
Shrub growth	32	53	10	5	48	43	6	3
Woodland	71	27	1	1	67	29	3	1

Figures may not total 100% because of rounding.

clinical illness suggestive of Lyme disease during the study period.

Discussion

This study sampled a group of employees working on Assateague Island, an area endemic for Lyme disease. Workers reported frequent tick bites, but there was no evidence of current or past infection with *B. burgdorferi* and no cases of clinical Lyme disease during the study period from May through October 1989. Notably, while self-reported prevention activities were common, they were not universal even in this population at high risk for tick bites.

Prior studies report seroprevalences ranging from 6% to 34%.[2–6] There are several possible reasons for the low risk of infection observed in the current study. Assateague Island may have a lower density of ticks and a lower prevalence of infection of *Ixodes dammini* by *B. burgdorferi* than other endemic areas. Detailed information on tick density and tick infection on Assateague Island is not available. However, the island has habitat and wildlife characteristic of other endemic areas. Sika deer *(Cervus nippon)*, white-footed mice *(Peromyscus leukopus)*, and *I. dammini* have been identified on the island.

An alternative explanation for the lack of *B. burgdorferi* infection is that knowledge of Lyme disease and awareness of tick bites is high on the island, and preventive activities adequately protect the workers. It should be noted that there were no significant differences in preventive behavior of workers who did and did not report tick bites, suggesting that preventive behavior interfered with Lyme disease transmission but did not prevent tick bites. This suggests that tick removal within 48 hours following tick attachment is critical. It is thought that spirochete transmission does not occur for at least 48 hours after attachment.[9] Over 90% of workers reported regular skin checks for ticks.

Preventive behavior has been studied in several other populations of outdoor workers. For example, compared with high-risk outdoor workers

Table 2. Self-reported tick-bite preventive activities at work and leisure activities by 86 outdoor workers on Assateague Island (summer 1989)

Preventive activity	At work % reporting use	At leisure % reporting use
Wear light-colored clothes	13	28
Wear long pants	71	29
Tuck pants into socks	15	10
Wear long-sleeved shirt	20	14
Wears hats	40	19
Apply repellant to skin	73	44
Apply repellant to clothes	59	37
Use permethrin on clothes	5	0

in New Jersey, where 5.7% of workers had serologic evidence of past infection with *B. burgdorferi*,[10] workers on Assateague Island practiced preventive behaviors more often. In accordance with prior research,[5,6] the data support tick bite prevention strategies decreasing the risk of Lyme disease.

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The residents' computer bulletin board system: Results of a 23-month pilot study

Ralph P. Woodward, M.D. and David I. Zolet, M.D.

ABSTRACT: *The Residents' Computer Bulletin Board System (RBBS) originated as an offshoot of a research project designed at a 1988 meeting of Baltimore's chief medical residents. Beginning on March 1, 1989, RBBS offered electronic mail, bulletins, file transfers, newsletters, and data collections to physicians-in-training. It operated for 695 days before ResNet, sponsored by the American College of Physicians, superseded it . This report details how medical students, residents, and fellows used this electronic means of communication and offers some conclusions about the elements that future computerized bulletin board systems should have to succeed.*

From the Franklin Square Hospital Center where Dr. Woodward was chief resident at the time of the study and Dr. Zolet is associate program director, Internal Medicine Residency Program.
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In August 1988, chief residents from eight of Baltimore's internal medicine residency programs met to discuss the design of a collaborative research project sponsored by the Associates of the Maryland Chapter of the American College of Physicians (ACP). The Residents' Computer Bulletin Board System (RBBS) was originally implemented to support this city-wide research project by remote collection and analysis of data from participating institutions and by subsequent distribution of results via computer modem.

It was apparent from the start that this research project would consume only a small portion of the computer's available resources. It was equally apparent that the RBBS could provide services beyond those required to support the ACP associates' project.

The RBBS, like other computer-based bulletin board systems, allowed users with similar interests, medical students, residents, and fellows, to exchange information and ideas primarily in the form of messages and files. Specific services offered by the RBBS included electronic mail, bulletins, file transfers, newsletters, and data collection. Electronic mail became especially and increasingly popular with a small group of Baltimore area medical residents.

The first version of the RBBS ran on donated equipment using a shareware version of *WILDCAT!* (Mustang Software, Bakersfield, California).

Setup and testing of the prototype bulletin board was completed in February 1989, and the RBBS took its first call on March 1, 1989.

Continuous growth in the use of RBBS prompted an upgrade in software, in late March 1989, to a commercial version of *WILDCAT!* that provided enhanced security and additional services. A desire to expand the service area and collect data on nationwide patterns of residents' computer bulletin board use lead to the installation of a toll-free "800" line in September 1989, thus establishing the first toll-free electronic bulletin board system devoted exclusively to physicians-in-training.

Installation of the toll-free line and subsequent announcements of the RBBS in several medical journals[1–3] was followed by a rapid increase in usership **(Figure 1).** After 23 months of regular service, the "800" line was discontinued on January 25, 1991, in anticipation of ACP's successor to the RBBS—ResNet, a major initiative introduced at the 1991 ACP annual session in New Orleans. In this report, we present data that may prove useful in improving the efficiency and effectiveness of electronic communications used by physicians-in-training.

Methods

Hardware for the RBBS included a 12.5 MHz 80286 IBM compatible with 1.5 MB RAM, a 42 MB fixed disk, and a 2400 BPS internal modem supporting a single telephone line. It operated on the DOS 3.2 system. We used *WILDCAT!* Version 2 (Mustang Software, Bakersfield, California), single-line version.

We limited membership in RBBS to medical students, residents, and fellows who completed a questionnaire at the time of their first sign-on. All users were required to provide a current residency program or medical school and a telephone number for verification of in-training status.

The RBBS provided information in the form of messages and files. A total of 176 program/data files were available. Messages, usually short enough to read on-line, could also be printed out for review later. Files, larger collections of information in either text or software program form, had to be transferred or downloaded to the user's machine to be run later. Unless marked private, messages were "posted" on the bulletin board for all users to read, thus forming an important shared source of information, which ranged from the policies governing residencies to technical problems with computer operations. Hierarchical user and file library levels provided security.

The RBBS operated from 5:00 pm to 8:00 am, Monday through Friday, and continuously during the weekend.

Results

Announcements regarding the RBBS were listed in the notice sections of the *New England Journal of Medicine,* the *Journal of the American Medical Association,* and the *Annals of Internal Medicine.*[1–3] Letters were sent to the deans of all medical schools and to selected chief medical residents. **Figure 1** shows the increase in user census from March 1, 1989, to a peak of 269 users on January 24, 1991. Growth entered an exponential phase corresponding with the appearance of announcements for the RBBS.

Forty-two percent of callers learned of the RBBS through the announcements in medical journals described above.[1–3] The remainder identified other sources such as a school newsletter, another bulletin board system, or word of mouth. When users were asked if they would pay long-distance charges if required, 54% answered negatively. Although callers used a variety of hardware, IBM, IBM compatibles (75%), and the Apple Macintosh (19%) were clearly the machines most commonly used.

During its 695 days of operation, the RBBS logged 4,516 calls from 269 medical students, residents, and fellows. An additional 52 callers did not meet the criteria for physician-in-training status, and another 12 callers were duplicate accounts.

One hundred seventy-seven callers (66%) completed the new-user questionnaire. Sixty-five percent of respondents were residents, while 25% identified themselves as students. Sixty-two percent of respondents were currently in internal medicine or intended to pursue an internal medicine residency, 9% were in family practice, and the remainder were from a variety of other residencies.

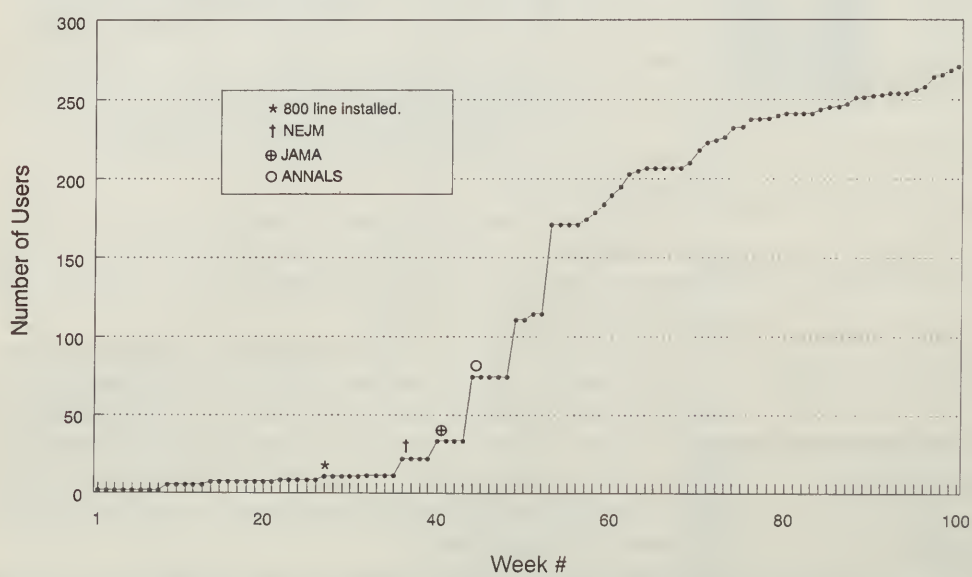


Figure 1. Cumulative growth in user census. Appearance of notices in major journals is indicated. Time period: March 1, 1989, to January 25, 1991.

Electronic mail, the most popular of the services offered by RBBS, provided an easy means of communication among residents. Communications most frequently dealt with curricular policies and procedures in different program settings, allowing for the exchange of ideas to improve educational and operational policies of residency programs.

The system's hard drive did not have sufficient storage space to allow us to track the activities of individual callers. The system did, however, track cumulative activity in the various areas of the bulletin board, so that a general representation of user activity could be constructed. The average number of calls per user was 17. Approximately 12% (33) of RBBS callers made 76% (3,423) of the calls. Fifty-five percent of users made fewer than five calls (**Figure 2**). A typical call was 11 minutes long. Although calls were evenly distributed among the days of the week, the busiest hours of the day were 8:00 pm to midnight (44% of calls). After connecting with the system, users were automatically notified of any messages waiting in their "mailbox." After collecting the "mail," users typically perused other messages on the bulletin board, which they could select by addressee or by subject matter. Security measures protected private mail. If desired, callers could post a message on the bulletin board; new messages were posted during 31% of all calls.

Users could go to any other area of the bulletin board by selecting the desired area from an on-screen menu. During their initial calls, 100% of new users accessed bulletins, which were informative pieces posted by the systems operators; during repeat calls, 28% of established users accessed bulletins.

A visit to the files section resulted in a transfer during approximately 20% of all calls. Forty-eight percent of users downloaded a file during the operational life of the bulletin board system, while only 10% uploaded files. The most frequently downloaded files were utilities software (45%), address files for fellowship programs (36%), and self-instructional programs (19%). All files were public domain and shareware (that is, none were copyright protected). One hundred eleven callers (41%) did not participate in any file transfer.

Figure 3 shows use of the "800" line over the 497-day period of toll-free service (September 15, 1989, to January 25, 1991). The average number of calls per user decreased. Average call duration also decreased over time, resulting in a gradual decrease in total monthly costs. This occurred even as the number of registered users increased.

Discussion

Resources for subsidizing toll-free telephone access for physicians-in-training are limited, mandating thoughtful and efficient distribution of services. Education of users is an important first step in cost reduction. Thirteen percent of our callers signed-off by dropping the carrier rather than allowing the RBBS to log them off. While this was not a problem with the RBBS, some commercial services charge penalties for inappropriate log-offs. Additionally, nearly 5% of users opened second accounts when they forgot their passwords rather than reporting the problem to system operators. Higher speed modems (at least 2400 BPS) have become inexpensive enough that users should be encouraged to use them whenever their use does not incur a connect-rate penalty. For similar reasons, system operators should educate callers to use the most efficient transfer protocol offered by the host system in order to reduce file upload/download times. This usually means foregoing the simplicity of XMODEM and, in some instances, may require host operators to supply callers with appropriate transfer software.

Despite continuous growth in user census, there was a downward trend in monthly connect time. Overall, this was desirable since we were able to reach more users without the expected increase in operating expense. Both a decrease in the average number of calls per user and, more importantly, a shorter duration of the average call contributed to the reduction in monthly connect time (**Figure 3**). The decrease in call duration appeared to result from fewer file transfers and less browsing by users. Users should be encouraged to reduce connect time by reading and writing electronic mail off-line, and systems operators should construct menus that allow users to find what they need as quickly as possible. In some instances, it may be desirable to institute a graduated pay scale to discourage long connect times and too frequent calling.

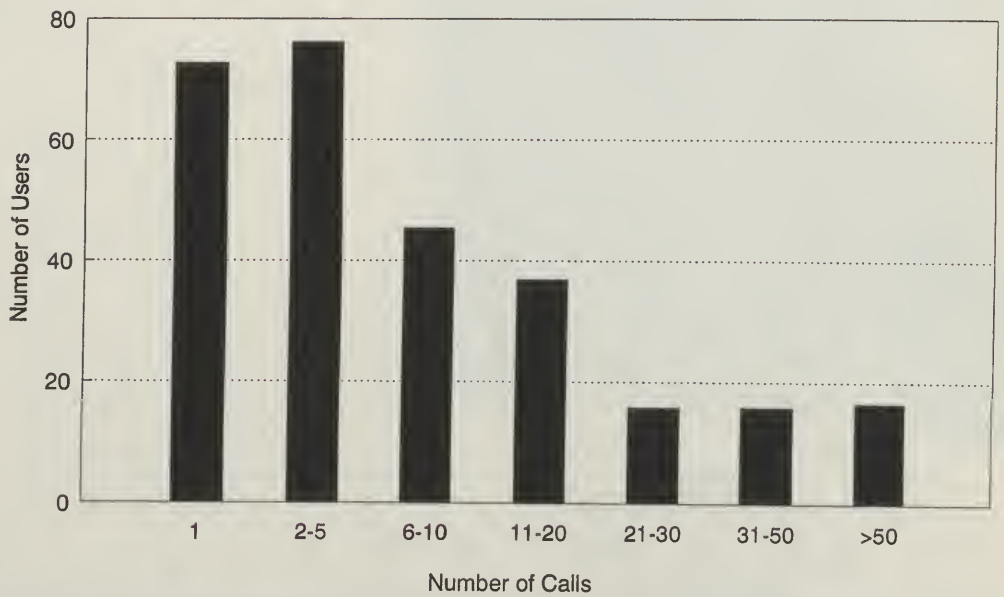


Figure 2. Frequency of user access to bulletin board.

Finally, since file transfers are time consuming and expensive, users should be given guidelines concerning the types of files that are appropriate for uploading.

We might postulate many reasons for the decreased use of the RBBS over time. First, the effect of the initial publicity may have worn off. Although the RBBS continued to add new users until termination, the rate at which new users joined, sharply decreased after the 60th week **(Figure 1).** A new set of announcements published at that time may have stimulated more growth during the second year of service.

Second, a large number of users had only one call to the system, and an equally large group had two to five calls to the system **(Figure 2).** The large pool of inactive and infrequent callers might suggest that the RBBS did not offer the kinds of services that interest residents or, possibly, many of these infrequent callers discovered the RBBS late in its life. Unfortunately, however, we have no time line that would place these callers in a chronologic sequence to confirm this possibility. Perhaps with a large number of users on a single telephone line system, frequent busy signals may have discouraged many interested users.

A third possible explanation for the decreased use of the RBBS centers around the issue of physician resistance to computer use. Attitude surveys have identified and categorized resistance along several lines, such as value conflicts, objections to change, and the need to undergo training to learn new skills. Investigators have found that a common source of resistance lies in the difference between the intuitive reasoning of the clinician, using qualitative information or "gut feelings" to formulate a clinical assessment, and the more rigid, quantitative, and objective input of discrete data required by available computerized "expert systems."[4–6]

Nevertheless, these surveys identify a generally positive attitude toward computerization among health care professionals, and among physicians in particular. These studies, however, have centered on the tasks of using computers for information and data retrieval and for clinical decision making. Such paradigms pit the computer against more time-honored reference sources, such as textbooks, print journals, and collegial consultation.

The RBBS, however, did not present the same dichotomy; it did not require a user to decide between two competing strategies for problem solving. Rather, the RBBS was a relatively easy-to-use, nearly passive gateway that provided access to information the user could not easily obtain except through computerized methods. The RBBS, therefore, did not represent a conflict between informational sources.

The true question becomes whether the information offered was of value or interest to users. The RBBS was, in a very real sense, a store, an information outlet, to which users could be attracted if the services and goods were of value. Huth has defined information that is of high value as being of high relevance, thoroughness, and efficiency with low cost.[7] Since RBBS met the requirement of low cost, we must consider whether inadequacy of its services and/or information caused the drop-off in use of the RBBS near the end of its operational life. As different physicians have different informational needs, ResNet and other means of electronic communication must be carefully tailored to meet the needs of physicians-in-training. Residents must define what constitutes the "useful information" that fits Huth's value equation.

In 1984, the Association of American Medical Colleges wrote in "Physicians for the Twenty-First Century:" "Medical schools should designate an academic unit for institutional leadership in the application of information sciences and computer technology to the general professional education of physicians and promote their effective use."[8] The services provided by bulletin board systems, such as the RBBS, clearly belong to this genre.[9] While much is made of some of the more dramatic areas of medical information sources (databases, graphics, expert systems), it should be understood that bulletin board systems provide support to all of these services through files, libraries, electronic publishing, electronic mail, data collection, bulletins, and newsletters.

Use of the bulletin board system is an easily learned skill that potentially provides access to a wealth of information in a relatively short time and at modest cost to the user. Users can access the bulletin board system at home and during leisure time, obviating

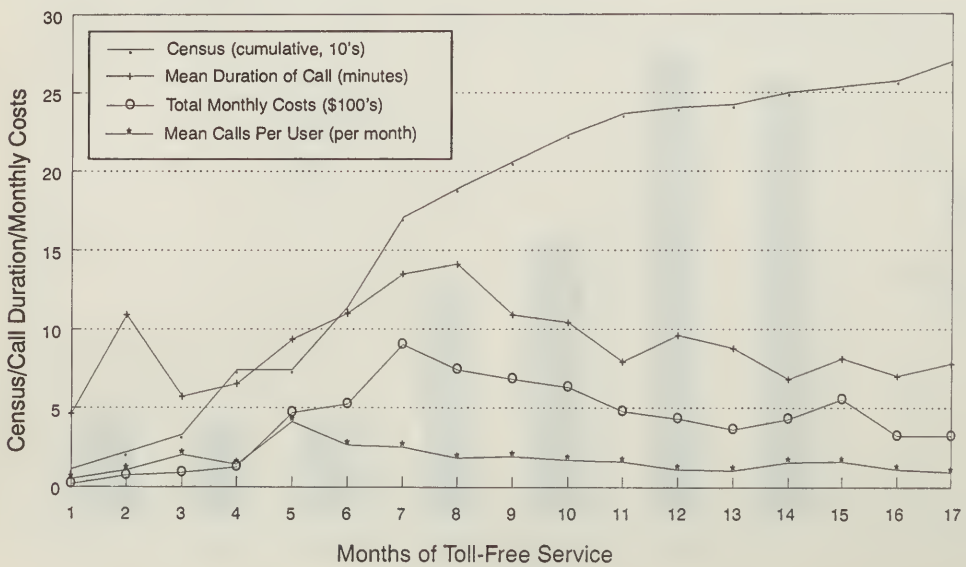


Figure 3. System statistics during period of toll-free operation. Time period: September 15, 1989, to January 25, 1991.

the concern that pressures on a busy resident preclude having time to go on-line. From this argument, we can expect that resistance to use of the bulletin board should be low and user activity high, provided the board allows access to the right information in a timely and cost efficient manner.

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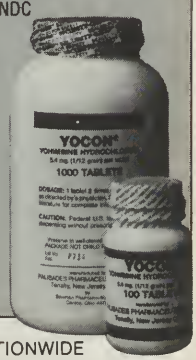
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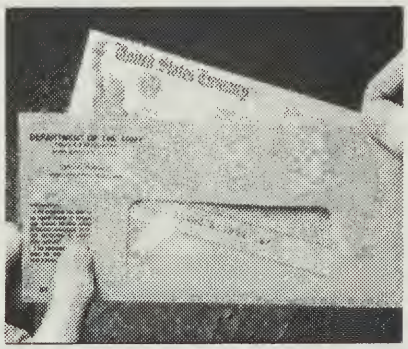
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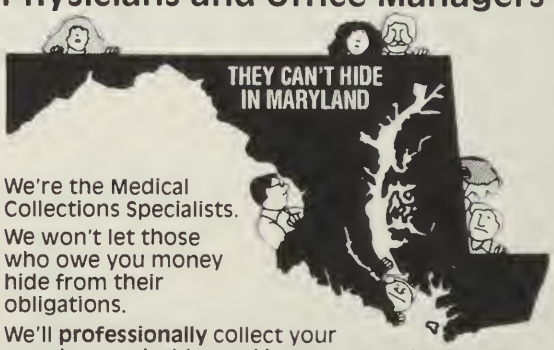
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Body stalk deformity in a twin pregnancy: Case report and review

Scott A. Glasser, M.D.; Nayere N. Zaeri, M.D.; and Harvey Nisenbaum, M.D.

ABSTRACT: *Body stalk deformity is a variety of the limb-body wall complex (LBMC)—the rare, complicated, congenital process believed to result from early rupture of the amnion and vascular disruption. Here we report a case of this anomaly in a twin pregnancy and describe the prenatal ultrasound findings.*

Dr. Glasser is a radiologist with Diagnostic Radiology Associates, Ellicott City, Maryland. Dr. Zaeri is a pathologist and Dr. Nisenbaum is a radiologist at the Albert Einstein Medical Center, Philadelphia, Pennsylvania.

A twenty-seven-year-old female, gravida two, para two (both normal and uneventful), made an initial visit to the obstetrical clinic at 20 weeks of gestation. At this time, alphafetoprotein levels were elevated. Ultrasound evaluation identified a diamniotic twin pregnancy without a discernable size discrepancy between the two fetuses. However, the ultrasound detected a ventral abdominal defect in fetus "B" **(Figure 1).**

Seven weeks later on the patient's second visit to the clinic, physicians believed on physical examination that the patient had an incompetent cervix, and they contemplated a cerclage. A viability study performed at that time revealed femur lengths of fetus "B" measuring 44 mm and 46 mm compared with femur lengths of 50 mm measured from fetus "A." In addition, there was oligohydramnios of fetus "B" along with the obvious abdominal wall defect (thought at this time to contain both bowel and liver) **(Figure 2).** The thorax was small and the spine could not be adequately visualized due to scoliosis **(Figure 3).** Normal kidneys and bladder were never identified. A normal cord was not present in fetus "B," although color Doppler did demonstrate flow from the placenta into the adherent extruded contents of the fetal abdomen via a short pedicle **(Figure 4).**

On the day following the ultrasound examination, the patient experienced contractions and ruptured membranes of the healthy fetus. An emergency cesarian section was performed with the premature normal fetus going to the neonatal intensive care unit, while the malformed fetus, fetus "B," born with an Apgar score of two, succumbed shortly after birth.

A postmortem examination of the fetus along with a radiograph documented the complex abnormalities present **(Figure 5).** The autopsy described a 490-gram male with 46 XYY karyotype, demonstrating a slightly right-sided abdominal wall defect with exteriorization of the liver,

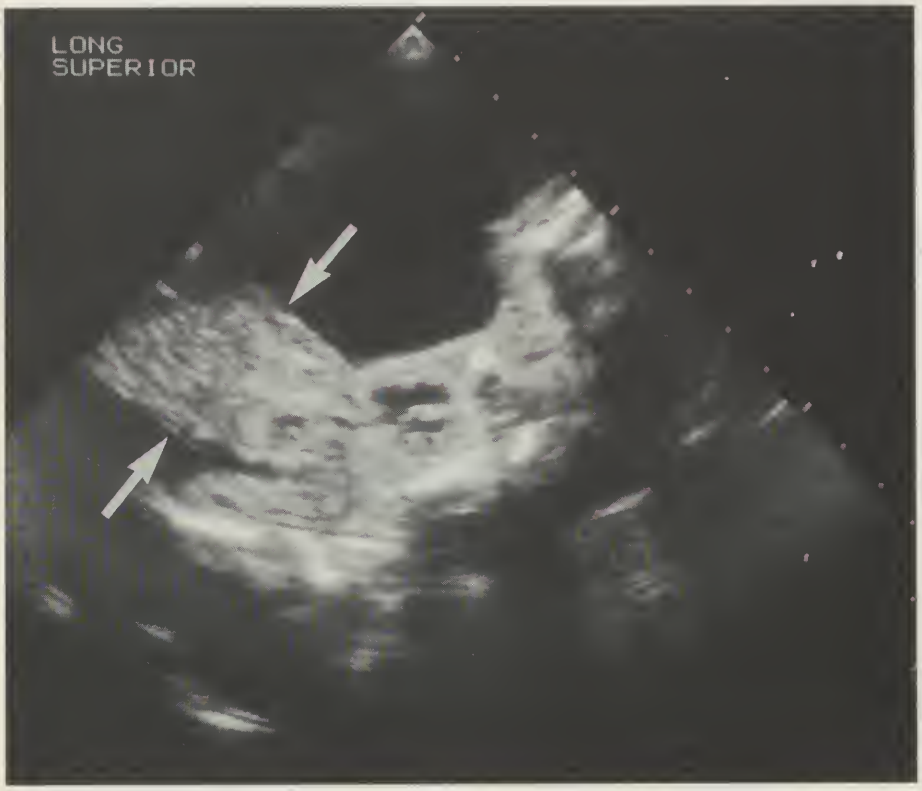


Figure 1. Arrows demonstrate the ventral abdominal wall defect seen during the first ultrasound examination at 21 weeks.

intestines, and spleen. Associated skeletal deformities included a severe scoliosis, flexion deformities of the lower limbs, and a shortened right leg. No amniotic bands were found. The umbilical cord was not formed; a single left-sided umbilical artery and umbilical vein coursed through a short segment of membranes. There appeared to be continuity of the amnion with the abdominal wall. Associated internal defects included severe, bilateral pulmonary hypoplasia with absence of normal lobulation, absence of the diaphragm, and absence of the right testicle. The left testicle was intra-abdominal. A small right-sided kidney was present along with small and disfigured adrenals. The bowel was malrotated and displaced. No abnormalities of either the heart or brain were identified **(Figure 6).**



Figure 2. The abdominal wall defect seen at 28 weeks was thought to contain liver as well as bowel.

Discussion

The limb-body wall complex (LBWC) malformation is a complex one whose mechanism is not fully understood. Indeed, a great deal of confusion exists concerning the terminology of LBWC. Synonyms of this entity include cyllosomus, pleurosomas, early amnion rupture sequence, and amniotic adhesion malformation syndrome.[1] An absent umbilical cord with direct adherence of the fetus to the chorion distinguishes the body stalk deformity as a variety of the LBWC. This is probably the entity that occurred in this case. Renal agenesis and single lower limb absence is termed sirenomelia.[2,3] Amniotic band syndrome, seen with the absence of a single limb segment, may actually be a less severe form of the LBWC spectrum.

Van Allen et al, in a study involving 25 cases of LBWC, demonstrated evidence to support the hypothesis that vascular disruption at four to six weeks gestation causes incomplete development of embryonic tissue secondary to hemorrhagic necrosis and anoxia.[4] This may lead to amniotic rupture and adhesion of the fetus to the amnion, as well as persistence of the extraembryonic coelum.[4,5] In addition, amniotic bands may cause extremity defects such as limb deficiency and amputation.[5,6]

The resultant abnormalities are protean and may include neural tube defects, scoliosis, limb anomalies, abdominal wall defects, facial clefts, hypoplastic diaphragmatic and paraspinal musculature, lung and cardiac defects, as well as intestinal malrotation.[2,4,5–8] Not surprisingly,



Figure 3. Scoliosis can be seen on the left-hand panel; while on the right, the abdominal defect is again visualized.

considering the propensity toward neural tube defects such as anencephaly, spina bifida, spinal dysraphism, and myelomeningocele, elevated alphafetoprotein levels have been reported previously in LBWC.[9,10] While being nonspecific, elevated alphafetoprotein levels found together with the ultrasound finding of an abdominal wall defect should prompt the examining physician to search for the sonographic clues that may help distinguish the certainly lethal entity of LBWC from the less catastrophic lesions of omphalocele and gastroschisis. However, because of the large number of abnormalities associated with the former, the physician may have extreme difficulty separating LBWC from omphalocele.

The sonograph in LBWC may include a multitude of findings (**Table**), but among them, the body wall defect (98%), limb defects (95%), amnion adherence to the body wall defect (85%), and scoliosis (77%) have been reported most consistently.[7–10] It may be difficult to visualize many of these abnormalities secondary to the presence of oligohydramnios.

Table. Potential sonographic findings in limb-body wall complex

Body wall defect	Abnormal tethering of the fetus to the chorionic plate
Limb defects	Short umbilical cord
Amnion adherence to the body wall defect	Midline facial clefts
Scoliosis	Exencephaly
Oligohydramnios	Spinal dysraphism
Complex mass anterior or lateral to a narrowed fetal trunk	Hydrocephalus (perhaps secondary to Arnold-Chiari)
	Renal agenesis

Although none of the 25 cases reported in the Van Allen study were associated with a twin pregnancy, an increased incidence of LBWC in monozygotic twins has been reported, especially in those cases associated with amniotic bands and in those cases thought to represent body stalk deformity.[11] This case, which we believe is the body stalk deformity and falls within the spectrum of LBWC anomaly in a twin pregnancy, represents an example of how the sonographic findings of short femur length, oligohydramnios, abdominal wall defect, scoliosis, and short or absent umbilical cord, together with an elevated alphafetoprotein level, led to the immediate clinical consideration of this extremely lethal entity.

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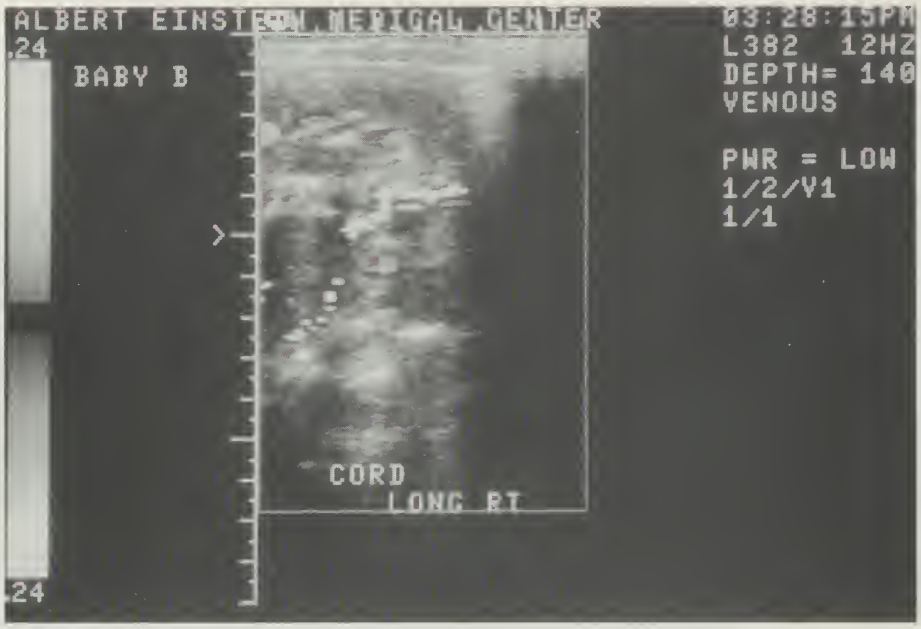


Figure 4. Color Doppler images demonstrate the abnormal appearance of the cord. No umbilical cord, per se, was ever identified, but rather a single artery and vein were seen at autopsy to course through a short segment of membranes.



Figure 5. Postmortem radiograph demonstrates the severe scoliosis, abdominal defect, and short right femur (arrow). There are also clubbed feet.



Figure 6. Pictures obtained at autopsy—anterior view. Note the abnormal appearance of the cord as well as the herniated liver, spleen, and intestine.

A brief history and discussion of certain mycotic infections and their importance to physicians*

Theodore E. Woodward, M.D.

ABSTRACT: *Mycotic infections are common and their incidence is increasing. They can be difficult to distinguish from other infections, particularly tuberculosis, but there are numerous clinical clues that can help suggest the presence of systemic mycoses. Histoplasma skin tests, serologic tests, and agent isolation can aid in the confirmation of a fungal infection. Clinical considerations must be put in the proper perspective before a definitive treatment is proposed. Specific chemotherapy is often curative.*

From the Department of Medicine, University of Maryland, where Dr. Woodward is professor of medicine emeritus, and the Baltimore Vereran's Administration Medical Center.

**Excerpts from a lecture presented at the Gorgas Army Hospital, Panama, on August 23, 1982.*

The incidence of mycotic diseases has increased markedly during the last several decades, and, for that reason, they are important to the practicing physician.[1] Medical advances that have accrued from the development of anti-microbial, anti-neoplastic, and anti-inflammatory drugs (steroids) have greatly reduced morbidity and mortality from many illnesses, including mycotic infections. Host defense mechanisms, however, have been altered in many of these patients, occasionally allowing tissue invasion by fungi. Thus, mycoses often occur in patients already ill with serious disease or in those under treatment. This large pool of patients, added to the group with primary mycoses, has made fungal infections prominent in the clinical category of obscure fevers.

When physicians of my age attended medical school, common teaching was that fungi were molds that grew on old bread and cheese; clinical expression in patients was supposedly rare. As a graduate of the University of Maryland School of Medicine, my indoctrination was a little broader because Dr. Samuel T. Darling graduated from Maryland's affiliate, the College of Physicians and Surgeons, in 1903. Always interested in pathology and the use of the microscope, Darling joined the Public Health Service after several years of clinical and pathologic training in Baltimore. He was subsequently assigned to Panama for work at the Ancon Hospital[2] (now Gorgas Memorial Hospital) (**Figure 1**).

Many laborers involved in the extensive work of building the Panama Canal suffered from malaria, yellow fever, and dysentery—disorders that



Figure 1. Samuel T. Darling, shown while in Panama. (Reprinted from *Journal of the Alumni Association of the College of Physicians and Surgeons* 1907; 9:97–102.)

exacted a tremendous toll. Darling's pioneer medical observation was first made in Panama in 1905 through his clinical and pathologic examinations of three canal laborers—two Martinicans and one Chinese—whose clinical illness resembled tuberculosis manifested by fever, weight loss, adenopathy, and hepatosplenomegaly. Postmortem revealed chromatin-like bodies in histiocytes (now called macrophages) of lung, hepatic, splenic, and lymph node tissues. The pigmented bodies resembled plasmodia with a surrounding halo that prompted the name *Histoplasma capsulatum* (**Figure 2**). Darling published his work in 1906,[3–5] and the disease soon became known as Darling's disease—a disseminated disorder that was almost uniformly fatal. Later, Darling became one of the nation's authorities on malaria and preventive medicine, holding high consultative positions with the World Health Organization. Unfortunately, he was killed tragically in an automobile accident while traveling on assignment in the Middle East in 1925.

In Baltimore, we are likewise proud that Thomas Gilchrist (**Figure 3**), professor of medicine in dermatology at Maryland and Hopkins, was the first to describe blastomycosis in 1894 (**Figure 4**).[6–8] Thus, two important fungal infections, histoplasmosis and blastomycosis, were originally described by physicians with Maryland ties.

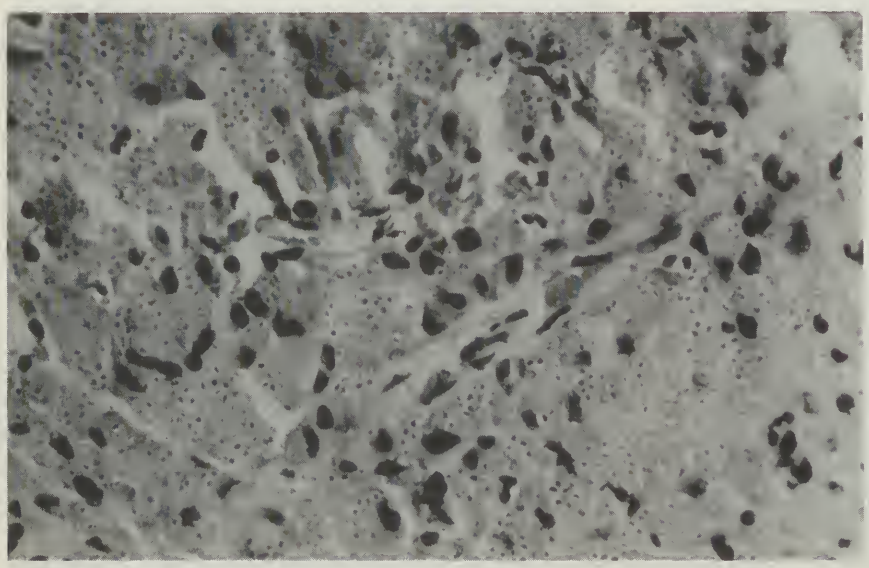


Figure 2. Photomicrograph of *H. capsulatum* in tissues.

Immunological considerations

Fungi often behave in a latent manner similar to tubercle bacilli. They are opportunists and emerge when the chemical or immunological environment is right to multiply and invade tissues. Many of us harbor *Candida albicans,* and those who have resided in rural areas probably carry a few viable *H. capsulatum. Candida* normally inhabit the intestine and skin; *H. capsulatum* probably reside within macrophages. Yet, one may not visibly suffer from *Candida* or histoplasma infestation and is unlikely to be injured by their presence unless infected with an overwhelming number of organisms or until host defenses are compromised.[9]

The person who pricks a finger with a rose thorn and subsequently develops sporotrichosis is an example of someone who has acquired a limited fungal infection due to an organism injected under the skin. Usually sporotrichosis is mild and can be effectively treated with iodine. Examples of a localized infection are shown in **Figures 5 and 6.**

Advances in medical practice help explain the increased incidence and dissemination of fungal infections. Medical progress has resulted in the development of corticosteroids and chemical agents designed to destroy neoplastic cells. Patients' immune defenses become compromised, leading to diminished leukocyte function and poor cellular immune reactions. Such patients often become defenseless. In spite of the proper use of antibiotics, steroids, and anti-cancer drugs, an environment can be created that makes it possible for fungi to invade organs and tissues they seldom damage under normal conditions. The disseminated illness reported by Darling is an excellent example.



Figure 3. T. Casper Gilchrist, who first described blastomycosis.

Systemic histoplasmosis of the type Darling described is rare, and it is likely that those who develop it today have diminished immunologic defenses.

Clinical clues to diagnosis of invasive systemic mycoses

Some of the clinical clues that Utz[10] stressed as useful for suggesting the presence of systemic mycoses are (a) obscure fever for several weeks; (b) elevated, small, crusted, draining skin lesions or persistent infections on the finger with lymphatic involvement; (c) persistent oral or laryngeal lesions with hoarseness; (d) persistent neurologic manifestations such as headache, visual or mental changes, or evidence of brain abscess with fever, localizing neurologic signs, and signs of increased intracranial pressure; (e) pneumonitis that persists in spite of antimicrobial treatment; (f) hepatosplenomegaly without anemia, leukocytosis, or cirrhosis in adults or children; (g) tissue evidence of granuloma in lung, lymph nodes, liver, prostate or skin; (h) persistently draining sinus tracts; and (i) unusual illness in patients with diabetes mellitus or lymphoma, or those undergoing prolonged corticosteroid, immunosuppressive, or radiation treatment.

Confirmation of a fungal infection

Histoplasmin skin test. Some of our current practical clinical problems relate to confirmation of the presence of a fungal infection. For example, many normal persons react strongly to histoplasmin injected intradermally since exposure to *H. capsulatum* is common in nature. As a boy raised in a small town, it was my Saturday morning chore to clean the chicken house. My skin continues to react strongly to histoplasmin. A positive reaction to this antigen does not necessarily indicate the presence of active illness. With histoplasmin, there are false positives and false negatives. Patients with active histoplasmosis may show negative skin results. Skin tests with fungal antigens are not reliable as confirmatory diagnostic aids.[1,10,11]

Serologic tests. A second method of confirming infectious disease is a serologic reaction test designed to detect specific antibodies, agglutinins, complement-fixing antibodies, precipitins, and immunochemical reactions. Available serologic diagnostic procedures are partially helpful but need improvement. When Dr. Charlotte Campbell (originally with the Walter Reed Army Institute of Research) and others developed antigens for *H. capsulatum* and other fungi, there was guarded optimism. Emphasis was placed on a rise in titer of complement-fixing antibodies or precipitins as indices of active infection. These serologic tests were shown to be occasionally useful but not wholly reliable; patients with active illness often failed to show antibody. Of all the serologic tests for the mycoses, precipitin, complement-fixation, and immunefluorescence reactions for the presence of antibody or antigen to *H. capsulatum* infections are the most helpful.



Figure 4. Original photomicrograph of *Blastomyces* described by Gilchrist. (Courtesy of Harry M. Robinson, Jr., M.D.)

Agent isolation. A third confirmatory laboratory test is isolation of the fungus from sputum, feces, spinal fluid, blood marrow, or individual tissues. It is not valid to conclude that the isolation of a fungus from the sputum, feces, or skin surface is indicative of specific causal illness, any more than the presence of a virus or a bacteria from the sputum or a mucus surface confirms that the tissue has been invaded by that agent. Isolation of fungi by culture takes time and must be interpreted properly in association with pertinent data.[1,10–12]

Agent identification. Every attempt should be made to visualize the causative fungi in tissues before the decision is made to administer an effective, but potentially toxic, drug such as amphotericin. It may be necessary to perform a skin, liver, or lung biopsy, or take surgical sections of other organs or draining sinus tracts in order to identify a specific organism by smear. Culture of such tissues on appropriate media should be performed simultaneously. Robert Koch stressed these principles years ago with his well-defined postulates.

Further means for demonstration of an agent in tissues include use of the electron microscope or immunochemical techniques demonstrating antigen or antibody in tissues. These measures are necessary to positively confirm, for example, that there is an aspergilloma of the lung, or that there is an actinomycotic infection of the pericardium **(Figures 7 and 8).**[1,10–13]

Principles of treatment

After clinical confirmation of systemic mycosis, the next problem is definitive treatment. The question arises whether a drug such as amphotericin, with its potent nephrotoxic side effects, or ketoconazole, which causes gastrointestinal abnormalities and interferes with hepatic drug metabolism, should be used, or whether the fungus infection will be self-limiting. Some mycoses may resolve spontaneously, such as the aerosolized sporadic type of pulmonary histoplasmosis or the allergic type of aspergillosis.[1,11–16] The thoughtful physician puts all considerations into proper perspective and makes a decision based on clinical factors.

In systemic mycoses with localized necrotic foci such as pulmonary histoplasmosis or actinomycosis, prolonged amphotericin B, 5-flurocytocine treatment, or other antibiotics may be necessary.[14–18] Ketoconazole is the drug of choice for nonmeningeal, non-life-threatening localized or disseminated histoplasmosis.[17–20] Ketoconazole, however, penetrates poorly into the cerebrospinal fluid; hence, amphotericin B is the drug of choice for histoplasma meningitis and all patients seriously ill with this disease.

Changing medical perceptions of fungal diseases

Knowledge of clinical data pertinent to the incidence and clinical importance of the mycoses has evolved slowly. Hamman and Wainwright listed the causes of obscure fevers in a



Figure 5. Sporotrichosis. Individual lesions along the lymphatics on hand and forearm. Satisfactory response with iodine treatment. (Courtesy of Robert T. Parker, M.D.)



Figure 6. Extensive lesion of sporotrichosis on forearm of 13-year-old boy. Confirmed by biopsy taken from the periphery of the lesion.



Figure 7. Fungus ball lesion in apex of lung caused by aspergilli at site of old, healed tuberculosis.

classic paper published in 1936.[21] Some of the diseases are familiar to today's physicians but fungal diseases were not included. In 1961, Petersdorf and Beeson published the findings on 100 selected patients with fever of unknown origin observed in the area of Yale-New Haven.[22] In this excellent article on obscure fever, fungal diseases were still not yet prominent. In 1965, however, Dr. Morton Rapoport and I collected retrospective clinical data on patients with granulomatous hepatitis.[23] The **Table** shows some of the medical conditions and infectious agents associated with granulomatous hepatitis found in the University of Maryland medical records system. There was no attempt to determine the incidence of specific cases, but various fungal diseases were prominently represented. Although hepatic biopsy is not an innocuous procedure, the liver is often a useful organ from which to obtain tissue for confirmation of the presence of certain fungi.

Table. Causes of granulomatous hepatitis

Infectious	Hypersensitivity	Other
Bacterial		Wegener's
Mycobacterial		Rheumatoid arthritis
Tularemia		Sarcoidosis
Brucellosis		Hodgkin's disease
Melioidosis		
Syphilis		
Rickettsial		
Q fever		
Fungal		
Histoplasmosis		
Coccidioidomycosis		
Actinomycosis		
Nocardiosis		

Example of a specific diagnostic problem

A white male, aged 49, presented himself with obscure fever that had persisted for over a year. He was ambulatory, but weak and tired easily. He had fever and sweating and appeared "walking sick." His wife gave helpful information when she said, "You know, he's better when he takes tetracycline." While one generally avoids giving antibiotics blindly, note how this statement was prophetic!

Pulmonary rales were heard in the lower right lung base, and there was mild cardiomegaly, tachycardia, and hypotension. A pericardial friction rub was heard intermittently. The chest roentgenogram showed slight cardiomegaly and a dense shadow in the right lower lung which intermittently appeared and disappeared during a year's observation. Whether the clearing occurred spontaneously or as a result of tetracycline treatment is unclear. A decision was made to perform an exploratory thoracotomy of the right side. The preoperative diagnosis was either tuberculosis or a fungal infection. Biopsy specimens of the lung and inflammatory tissue in the mediastinum and pericardium were obtained with the right-sided approach.



Figure 8. Aspergillosis. Mature columnar fruited head of *Aspergillus fumigatus.* (Courtesy of A.G. Smith)

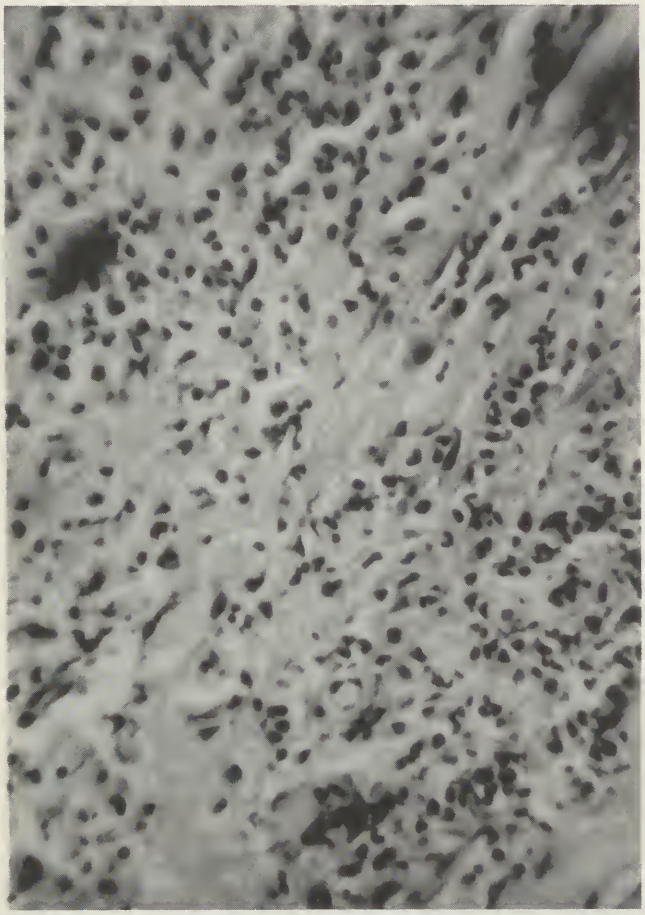


Figure 9. Actinomycosis. Photomicrograph of initial frozen biopsy specimen, patient showing inflammatory reaction principally of polymorphonuclear leukocytes and no granuloma formation.

Figure 9 is the photomicrograph of a lung specimen with inflammatory cells that are mostly polymorphonuclear leukocytes. A number of frozen sections examined at the time of surgery failed to identify a specific agent or lesion. It appeared that the purpose of the thoracotomy had not been accomplished. For several days, no specific agent was identified by culture of all appropriate media; examination of formalin-embedded sections showed no granulomata. The pathologist continued his search; after several weeks and examination of many microscopic sections, he reported enthusiastically that an agent had been identified. The ray fungus of actinomycosis (**Figure 10**) involved the lung, mediastinum, and pericardium. Without multiple sectioning, the diagnosis would have eluded us.

Geographic distribution of histoplasmosis and blastomycosis in the United States

Shown in **Figure 11** is an older map of the distribution of histoplasmosis and blastomycosis in the United States.[7–8] Maryland is on the edge of the blastomycosis belt (which centers in Kentucky, Tennessee, and surrounding states) and of the histoplasmosis belt. Histoplasmosis infection occurs commonly in those states bordering the Mississippi River and is said to have spread to the eastern states via prevailing winds. Overall, the geographic areas of incidence of blastomycosis and histoplasmosis are similar. Informative data on the incidence of histoplasmosis in Maryland and vicinity have been collected and published by Chase.[24]

Conclusion

Mycoses are common and here to stay. Physicians must be aware of their presence and learn to distinguish them from other infections with similar clinical manifestations, particularly tuberculosis. The lungs are the most commonly involved organ since many of the human mycoses are contracted by aerosol exposure. Acute, subacute, and chronic forms of pulmonary fungal infection occur. The most reliable means of confirmation of a mycotic infection is by biopsy of tissue and identification of the agent by smear and culture. Specific chemotherapy is often curative. In 1982 [and in 1993], as Samuel T. Darling said in 1907, "don't let this disorder catch you napping."

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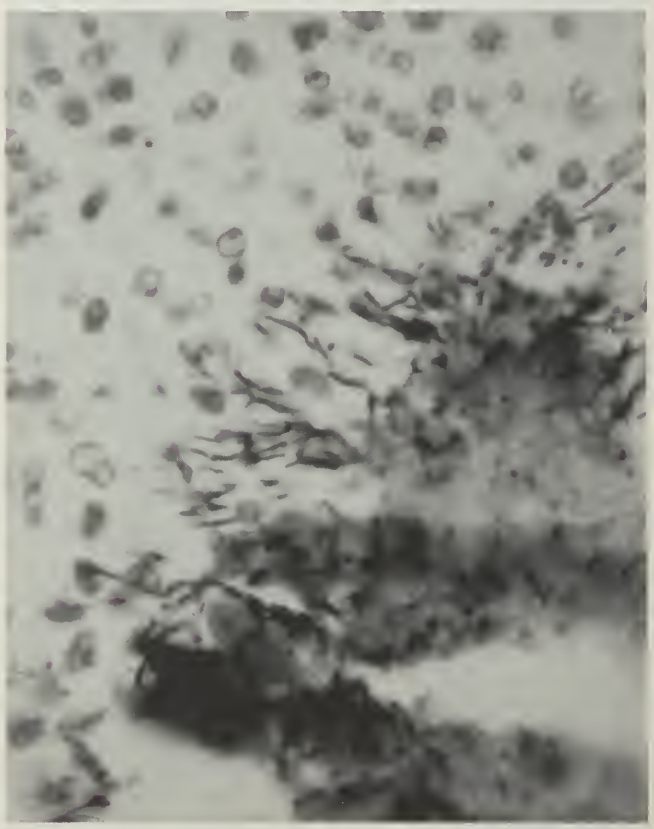


Figure 10. Photograph of specimen of mediastinal inflammatory tissue showing characteristic Ray fungus of actinomycosis.

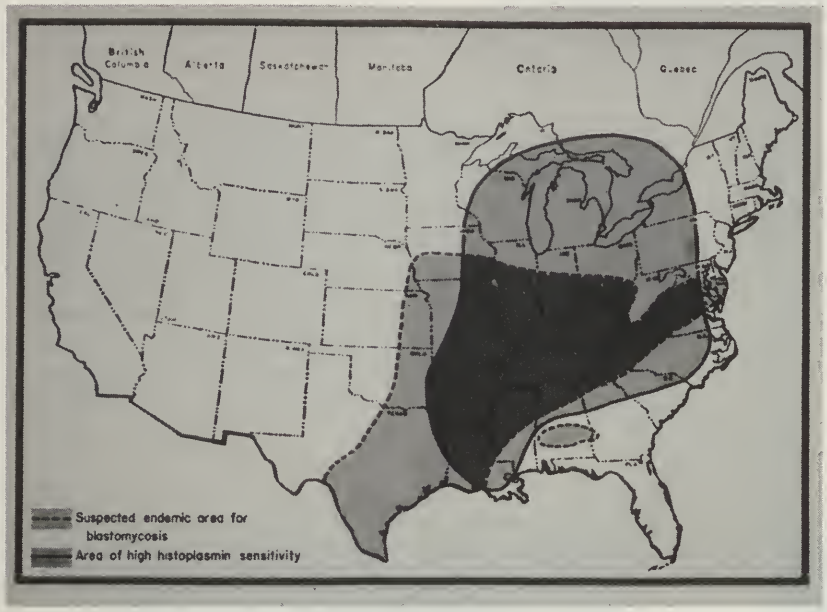


Figure 11. Map showing distribution of blastomycosis and histoplasmosis in the United States in 1966. (Reprinted from Menges, RW. Clinical and epidemiological studies in 79 canine blastomycosis cases in Arkansas. *Am J Epidemiol* 1965; 81:164–79.)

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Imaging Case of the Month

CASE ONE. This 53-year-old white female was awakened in the early morning with diffuse upper abdominal pain, worse in the right upper quadrant, exacerbated by movement, and radiating to the back, followed by nausea and nonbilious vomiting. She also noted aching of her feet. When the pain persisted over 24 hours, she came to the hospital. Past history was notable for peptic ulcer disease and gallstones. She had had a similar attack of pain two years earlier. On physical examination, the abdomen was diffusely tender with guarding in the right upper quadrant. The white blood count (WBC) was 9000, hematocrit (Hct) was 36%, and a liver function test (LFT) and urine analysis (UA) were normal. The patient was afebrile on admission to the emergency room.

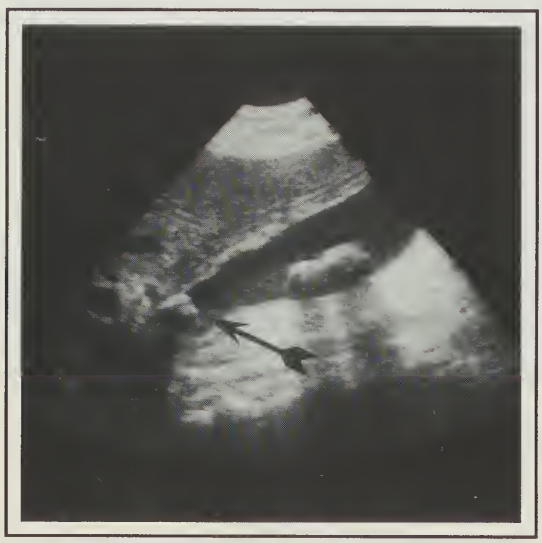


Figure 1A.



Figure 1C.



Figure 1B.



Figure 1D.

CASE TWO. This 54-year-old white female came to the emergency room with poorly localized upper abdominal pain, which had increased over four days and was associated with increasing nausea but no vomiting. Past history was notable for multiparity. On physician examination, the upper abdomen was tender, with guarding in the right upper quadrant. Her temperature was 100.2 F^{o}, total bilirubin was 3.1 (direct, 2.0; indirect, 1.2), WBC was 10,000, and UA was normal.



Figure 2A.



Figure 2B.

PHYSICIAN AUTHORS WANTED

"Imaging Case of the Month" is a regular feature of the *Maryland Medical Journal.* Coordinated by the Maryland Radiological Society, the cases presented provide a review of a broad range of diseases and pathological processes of interest to a wide range of specialists.

Physicians interested in submitting cases for publication consideration should contact the deprtment editor:

Edgar C. Fearnow, M.D. c/o Drs. Schultze, Snider & Assoc., P.A.
Suite 100, 21 Crossroads Drive, Owings Mills, MD 21117
410-363-6677

Acute cholecystitis

Case one. Ultrasound shows cholelithiasis with one stone apparently impacted in the neck of the gallbladder (long arrow, **Figure 1A**). The technetium 99m with imidodiacetic acid (IDA) scan shows a "blush" (short arrow) in the liver adjacent to the gallbladder fossa on the first static image (**Figure 1B**). The gallbladder was not visualized at 25 minutes (**Figure 1C**) or after clearing of the tracer from the liver (**Figure 1D**).

Case two. Ultrasound (not illustrated) showed a dilated common bile duct and stones in the gallbladder. The initial phase of the IDA scan showed a similar pattern with an immediate hepatic parenchymal "blush" (arrow) adjacent to the gallbladder fossa (**Figure 2A**), but in the patient, there was prolonged retention of the tracer in the liver with nonvisualization of the bile ducts and bowel, consistent with high-grade, common duct obstruction (**Figure 2B**).

The imaging workup of acute cholecystitis usually begins with ultrasound. The sonogram provides information about the presence of stones, thickening (edema or fibrosis) of the gallbladder wall, size of the common bile duct, or abnormal fluid collections (abscesses). It also gives the radiologist the opportunity to see whether the tenderness is truly in the region of the gallbladder (sonographic Murphy sign). When stones, wall thickening, and a positive Murphy sign are present, ultrasound alone has a sensitivity of about 80% to 96% and a reported specificity as high as 94% for acute cholecystitis.[1–3] The presence of pericholecystic fluid increases the probability of acute cholecystitis, but it is not specific.

If the sonographic findings are not typical or do not match the clinical picture, nuclear hepatobiliary scanning with technetium 99m labeled with imidodiacetic acid (IDA) derivatives may be used to evaluate the patency of the cystic duct. Failure of radiotracer to enter the gallbladder predicts the surgical diagnosis of acute cholecystitis with a sensitivity and specificity of over 95%.[1] Hyperemia of the portion of the liver adjacent to the inflamed gallbladder can be seen in both of these cases as a "blush" of the hepatic parenchyma, which appears immediately, and may also be seen in the vascular flow phase of the study. This parenchymal blush may be so intense as to simulate gallbladder activity, but it is usually not continuous with the biliary tract and outlines the expected location of the gallbladder fossa.

A false positive scan may occur if stasis of bile in the gallbladder has developed due to prolonged fasting, parenteral nutrition, or alcoholism. This problem may be avoided by injecting sincalide (the active C-terminal octapeptide of cholecystokinin) to empty the gallbladder prior to the injection of the radiotracer. An alternative to sincalide is the injection of a small amount of morphine to contract the sphincter of Oddi and allow the increased pressure in the common bile duct to force some tracer into the gallbladder. Both techniques seem equally effective in reducing the false positive rate. False negative scans, though rare, occur in about 8% of cases of acalculous cholecystitis.[4] Acalculous cholecystitis occurs in 2% to 10% of all cholecystectomies.

Common bile duct obstruction may interfere with the diagnosis of acute cholecystitis by preventing excretion of tracer by the liver. Although a larger dose of the radiopharmaceutical is given in this situation, based on the bilirubin level, it may not be possible to obtain adequate excretion if the obstruction is acute and severe (**Case 2**). Ultrasound findings and secondary scintigraphic signs, such as the hepatic parenchymal blush, may be helpful in choosing appropriate therapy in this setting.

The relative costs of these studies should also be kept in mind. A nuclear hepatobiliary scan usually costs at least two or three times as much as an abdominal sonogram. This difference reflects the higher cost of gamma cameras and the longer time necessary to perform functional hepatobiliary examinations. Both studies should not be ordered simultaneously if ultrasound alone will answer the clinical question.

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WORD ROUNDS

Bart Gershen, M.D.

Sic transit gloria mundi

The last of the Stuart monarchs was Queen Anne, who ruled England from 1702 to 1714. During her reign, Charles II of Spain died leaving no heir to his throne. King Louis XIV of France immediately proclaimed his grandson Philip to be the new King of Spain. This decree incensed the British government, however, which formed a Grand Alliance with the Dutch Republic, the Holy Roman Empire, Prussia, and Portugal. The alliance launched a 13-year war to unseat Philip V from his Spanish throne—which became known variously as the War of the Spanish Succession or Queen Anne's War. In North America, it was called the second French and Indian War.

Although the Duke of Marlborough, John Churchill (distinguished ancestor of Sir Winston Churchill), was conducting a superb military campaign against both France and Spain, there were many in England who were critical of his tactics and those of his patron, Queen Anne. One obscure man, however, rose passionately to their defense.

His name was Thomas. He lived in Bristol, was an accomplished seaman, and had acquired a surfeit of military ideology from his father who had been a Royalist cavalry officer. In addition, Thomas was a physician. Educated at both Oxford and Cambridge, he subsequently completed an apprenticeship under Dr. Thomas Sydenham, who also treated him for small pox at no extra charge.

Sydenham, of course, had described **Sydenham's chorea**—a neurologic disorder consisting of involuntary movements of the arms, trunk, and legs; gait disturbances; and dysarthria—usually detected in young women, and classically resulting from acute rheumatic fever. In 1944, Dr. T. Duckett Jones specified the essentials requisite for a clinical diagnosis of rheumatic fever, among which Sydenham's chorea was listed as a major criterion.[1]

Sydenham's chorea is also referred to as **St. Vitus's Dance.** Vitus was a Sicilian boy who had been martyred in 303 AD during the tyrannical anti-Christian persecutions of the Emperor Diocletian. Subsequently, the dead youth was elevated to sainthood, and statues were built to honor him in many cities throughout Europe. Then, during the 11th and 12th centuries, his worshipers began to develop very curious behavior. On St. Vitus's Feast Day, maniacal throngs of celebrants gathered to dance around his statues. These undulating dancers ultimately reached a frenzy of ecstasy and fainted or developed convulsive seizures. The reason for their grotesque conduct was never entirely explained, but St. Vitus and his dancing idolaters have become a metaphor for rheumatic chorea.

Chorea itself is borrowed directly from Latin and means 'dance'. It can be found in such words as **choreo**graphy and terpsi**chorean.**

Returning to our protagonist—in 1708, Thomas was engaged in an active general practice, but he could not remain passive while his

queen was being deprecated and his country threatened by an insolent Spanish adversary. So he outfitted a galleon, hired expert seamen, and began a three-year voyage that became the most successful pirate crusade in English history.

Sailing through Drake's Passage around Cape Horn, he plundered and sacked the Spanish cities of Ecuador and Chile. Then, after unprecedented success, he returned to England carrying a vast booty that he proceeded to share with his grateful monarch.

Eventually he returned to medical practice, his newfound wealth permitting a more leisurely pace, and a grateful nation affording an adequate supply of patients.

His full name was Thomas Dover (1660-1742). At one time, he was prominent in medicine for having developed a popular sedative consisting of 10% opium, 10% ipecac, and 80% lactose. It was known as **Dover's Powder.** Today, it is hardly remembered.

Queen Anne died in 1714, shortly after the Treaty of Utrecht. Her claim to posterity, as trifling as it was, forever obligated to a war which endured her name. Since she had no children, British rule passed to the German royal house of Hanover, and King George I, who spoke no word of English, became the next King of England. During World War I, King George V renamed the British imperial family "Windsor," in order to disassociate completely from his German heritage.

Queen Anne's Lace, a biennial plant in the parsley family, is not named for the above English monarch. Rather it is named for Anne of Bohemia, wife of King Richard II, who lived in the 14th century. This plant is actually a wild carrot with bitter, albeit edible, roots—which were once used as a mild diuretic. Its taxonomic designation, *Daucus carota,* is distinguished from the domestic carrot, which is *Daucus carota sativa.*

Now there is one fascinating addendum to the story of Dr. Thomas Dover.

In 1563, a Spanish explorer named Juan Fernandez had discovered three tiny volcanic islands in the South Pacific, approximately 400 miles west of Valparaiso, Chile. Fernandez claimed them for his government and had lived there for several years, stocking the area with domestic pigs and goats. Then he abandoned the islands, which still bear his name.

After he had gone, the islands remained uninhabited and were used mainly by local fisherman or by migrant seamen who stopped to replenish fresh water and food stores after rounding Cape Horn.

In 1704, a pirate ship made such a layover. Among the buccaneers was a Scottish sailor named Alexander Selkirk. Following a violent argument with his captain, Selkirk was forced to leave the ship, marooned indefinitely on Mas a Tierra, one of the three islets in the Juan Fernandez chain.

However, in 1709, Thomas Dover and his crew, responding to distress signals, discovered the deserted sailor, took him on board, and brought him back to England.

Shortly thereafter, based on Selkirk's tale, Daniel Defoe made him into a hero for all ages. He wrote *Robinson Crusoe.*

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A Clinical Moment with Diabetes

The importance of early diabetic retinopathy detection

Doctor, I am 59 years old and was recently diagnosed as having diabetes. After my initial visit to my diabetes specialist, I was advised to make an appointment to see an ophthalmologist to see if diabetic changes in my retina were visible. I was surprised that there was a possibility that diabetes had already affected my eyes, since my vision is fine. Is it possible I could already have significant damage? If my ophthalmologist finds any problems, is there anything that can be done to prevent my losing vision?

Your doctor asked you to see your ophthalmologist to be absolutely certain that early changes in the retinal blood vessels had not occurred because of diabetes. These changes can be very subtle, and special techniques may be required to detect them. Many patients with adult onset (or Type II) diabetes have had the disease much longer than they think, and it is possible for significant diabetic retinopathy to be present in a newly-diagnosed patient. Some diabetic patients require treatment in spite of their not having symptoms.

Diabetic retinopathy is the leading cause of new cases of legal blindness among Americans between the ages of 20 and 74, and the American Academy of Ophthalmology has recently initiated a "Diabetes 2000" project in an effort to significantly reduce the effects of this disorder by the year 2000. Detection of diabetic retinopathy is the critical step in the management of the problem because early cases respond much better to therapy.

The retina is a thin membrane, shaped like a coffee cup, that lines the back of the eye like a film in a camera. It receives light waves and transmits visual messages to the brain. The retina contains blood vessels that are visible to a doctor using an ophthalmoscope. Most patients with diabetes ultimately develop abnormalities in their retinal blood vessels, and the likelihood of these changes increases with the duration of time a patient has had diabetes. Juvenile diabetics usually do not develop retinal changes for many years after they are diagnosed, but diabetic retinopathy can appear in adult-onset cases even before the diagnosis of diabetes is confirmed. Diabetic retinopathy is usually classified as either nonproliferative or proliferative. The former type of retinopathy is most common, and it affects visual acuity by causing a leakage of serum into the central retina. Even at its worst, this type of retinopathy does not cause total blindness, but can severely limit the ability to read, drive, and recognize friends. Proliferative retinopathy, on the other hand, can cause a profound loss of all vision because of severe hemorrhage or retinal detachment. This type of retinopathy is characterized by a proliferation (or growth) of fragile abnormal vessels upon the inner surface of the retina.

Fortunately, when treatment is indicated, it is of proven value in reducing the chances of visual acuity loss. The National Eye Institute sponsored and funded three major multicenter trials that proved conclusively that laser therapy was of value in treating both forms of diabetic retinopathy. The decision to recommend laser therapy is usually based on the appearance of the retina rather than upon the vision or symptoms of the patient. Indeed, patients with advanced proliferative diabetic retinopathy may have no symptoms and still be in desperate need of therapy. Thus, diabetic patients without symptoms should not assume that they are free of retinopathy.

If your eye exam reveals no signs of diabetic retinopathy, then an annual dilation exam is all that is necessary to be certain that worrisome changes are not occurring. On the other hand, if significant findings are observed on your initial evaluation, closer follow-up visits may be in order.

In summary, it is important for your team of doctors to be certain of the status of your retinal blood vessels so that your chances of later losing any vision are significantly minimized.

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Dr. Wilkinson is chief of opthalmology, Greater Baltimore Medical Center, Baltimore, Maryland.

JAMES MERSEY, M.D.
Editor ■

Commentary

Diagnosis and treatment of depression in late life: Summary of the NIH consensus statement

Depressive illness is a major public health problem among Americans 65 and older. An estimated six million of the nation's 31 million people in this age group suffer with depressive symptoms severe enough to warrant treatment. There is also significant evidence that large numbers of elderly with depressive symptoms are misdiagnosed and untreated because the characteristic signs are masked by chronic medical problems or accepted as a normal part of aging.

Studies suggest that failure to get appropriate help for depressive symptoms—which are highly treatable—can lead to severe dysfunction, disability, and suicide. Health care experts are concerned that depressive illness will become an even greater public health problem in the future, since Americans 65 and older make up one of this country's fastest growing age groups.

During the past decade, substantial progress has been made in understanding depression in late life, but questions remain about the effectiveness of pharmacotherapy and psychotherapy treatments and how concurrent medical illness or physiological aspects of aging may alter responses to treatment.

To address these important issues, a Consensus Development Conference on the Diagnosis and Treatment of Depression in Late Life was convened by the National Institute of Mental Health (NIMH), in conjunction with the Office of Medical Applications of Research and the National Institute on Aging of the National Institutes of Health. The three-day meeting, held in November 1991, brought together experts in psychiatry, psychology, neurology, nursing, social work, internal medicine, epidemiology, and statistics.

Following presentations by biomedical and behavioral scientists and health care providers, and discussion by the audience, the panel considered the scientific evidence and reached a consensus on important issues affecting the management of depression and its symptoms in older Americans. In the statement, the panel reviewed what is known about diagnosis and useful treatments, identified areas needing further study or research, and stressed the need to alert both health care providers and the lay public to the seriousness of depression in late life.

In developing the consensus statement, the experts considered "depression" in a broad sense to describe a syndrome that includes physiological, behavioral-affective, and cognitive symptoms ranging from mild to severe.

According to criteria published in the American Psychiatric Association's *Diagnostic and Statistical Manual (DSM-III-R)*, symptoms of depression include changes in appetite and weight; disrupted sleep; diminished motor skills; fatigue and loss of energy; depressed or irritable mood; loss of interest or pleasure in normal activities; feelings of guilt, worthlessness, or self-reproach; lapses in concentration or thinking abilities; and suicidal thoughts or attempts.

The panel of experts concluded that key factors in the frequent misdiagnosis of depression in older people include the multiple, sometimes chronic, medical problems that overshadow depressive symptoms; a tendency for older adults not to report depressed moods; the willingness of the patient, family members, and health care professionals to expect and accept lower functioning abilities; and other social and economic difficulties that often accompany old age.

Among people 65 years of age and older, an estimated one million people suffer from major depression, while another five million people experience symptoms of depression severe enough to need treatment, according to the NIMH Epidemiologic Catchment Area (ECA) Study to assess the prevalence of mental disorders. The survey showed that the rate of depression and depressive symptoms in the over-65 age group ranges from 5% in primary care clinics to 15% to 25% in nursing homes. Over a one-year period, nearly 13% of nursing home patients develop new episodes of major depression and an additional 18% develop new depressive symptoms.

Although the incidence of depression in older adults varies widely according to the study sample and the criteria used to identify symptoms of the mental disorder, risk factors associated with higher levels of depression mirror those found in younger age groups. For example, in all age groups, women who are unmarried or widowed, burdened with stressful life events, or who lack a supportive social network are the most vulnerable. Studies also show that depression often accompanies physical problems like stroke and cancer, and that suicide is higher among people who suffer from depression.

The panel said that treatment goals for older adults should focus on decreasing the symptoms of depression and reducing the risk of relapse and recurrence, increasing the quality of life and improving medical health, and decreasing health care costs and mortality.

Psychosocial therapy and biological therapy, which includes pharmacotherapy and electroconvulsive therapy, are the major treatments available for depression. Numerous clinical trials involving adults of all ages have shown that about 60% of depressed patients improve when they are treated with antidepressant medications. However, more research is needed to determine if the rates of symptom relief, side effects, and quality of life measured in younger age groups are different in elderly patients. To date, few studies have focused on the growing numbers of people 80 and over. Studies also are lacking on how medical illnesses influence the treatment of depression in older adults.

Treatment compliance was seen as a serious problem among older patients. Studies presented to the panel showed that an estimated 70% of patients fail to take one-quarter to one-half of prescribed medications.

Electroconvulsive therapy (ECT) has been shown to be a safe and effective treatment of depression in the older patient. Studies have supported the need for more widespread availability of this treatment.

Psychosocial treatments including cognitive-behavioral, behavioral, interpersonal, and short-term psychodynamic therapies, are considered moderately effective in treating depressive symptoms among older people. As with clinical trials involving medications, however, few studies have been done to measure the efficacy of such psychological therapies in medically ill elderly or very old patients. Marital and family interventions, which have been successful in younger adults, also have not been evaluated in the elderly.

The panel also identified the special needs of the more than 800,000 Americans whose spouses die each year. Most widows and widowers are older and experience varying degrees of depressive symptoms in dealing with their grief. At least one-third of them meet the criteria for a major depressive episode in the first month after their spouse's death, and one-half of them remain clinically depressed a year later.

The panel identified a number of other problems:

- The stigma of mental illness as well as the acceptance of depression as part of aging deter many older adults from reporting their symptoms to family members or a physician, or from getting help if referred.
- Although about 85% of elderly adults visit a primary physician at least once each year, the majority of those who have depression are not diagnosed or treated for it.
- Patients who do receive treatment often stop taking

A review of the NIH consensus statement

Depression is common in elderly, medically ill patients, and many depressed elderly seek treatment from a primary care physician. This consensus statement is an excellent overview for the interested clinician on the topic of depression in late life. For example, it notes that 25 randomized studies have found antidepressants to be more effective than placebos in treating depression in the elderly. Several practical aspects of treatment are clearly reviewed. Antidepressant response may take 6 to 12 weeks in the elderly—a longer period than is usually required in the young. The measurement of plasma antidepressant levels is particularly important in the elderly and can ensure appropriate dosage, assure compliance, and avoid toxicity. The report also notes the importance of electroconvulsive therapy (ECT) in treating elderly depressives and points out that patients 60 and over constitute the largest age group receiving ECT.

The statement is also useful in defining aspects of late-life depression that are not known. Side-effect comparisons of ECT and tricyclic antidepressants have not been carried out, and surprisingly few studies on the psychosocial interventions with the elderly are in the literature.

The panel suggests four specific steps to improve treatment in depressed older individuals:

1. Continuing education programs should be designed to improve the knowledge of practicing physicians about depression.

2. Improved methods of case-finding in outreach need to be developed.

3. Training programs for the staff in institutional settings and community agencies need to be developed.

4. Outreach and social service delivery models for day-care and senior citizen programs should be developed.

This consensus statement should be of interest to all practicing physicians. Most practitioners will find that it does not discuss depression in the elderly in enough depth to stand on its own as an educational tool, but it does highlight our current understanding of late-life depression and will alert the clinician to the important questions in relation to its treatment.

PETER V. RABINS, M.D.

Dr. Rabins is an associate professor of psychiatry at the Johns Hopkins Medical Institutions. ■

prescribed medications, suffer side effects, or abandon treatment because they are overwhelmed by grief, poverty, or isolation.

- Many older adults are confused and overwhelmed by fragmented systems providing medical and mental health care and social services, and by myriad eligibility and funding requirements.
- Few training or continuing education programs exist to help primary care providers and mental health professionals learn to diagnose and treat depressive symptoms in older patients.
- Large numbers of elderly people live alone without adequate support systems.

The panel of experts offered these conclusions and recommendations as part of its consensus statement on depression in older people:

- Depression, which is widespread among older adults, is often misdiagnosed and not appropriately treated in the majority of cases in this age group.
- The prevalence of depression in nursing homes and residential care settings is high, and comorbidity with medical illnesses is common. Suicide rates are much higher among depressed elderly patients than in the general population.
- Data indicate antidepressant medications, ECT, and psychosocial intervention are effective treatments for depression and depressive symptoms in older adults. However, more research is needed to determine how factors like comorbidity of other medical illnesses and age-related reactions to medications affect treatment responses in this age group.
- Health care professionals accept impairment as part of aging and often lack the knowledge or skills needed to recognize depression in older patients. Training and continuing education programs should be provided to improve caregivers' knowledge and recognition of depressive symptoms and treatment intervention.
- Outreach programs are needed to identify and help the large number of elderly persons who suffer from depression or depressive symptoms but live alone without family or social support systems.

Free, single copies of the complete NIH consensus statement on the Diagnosis and Treatment of Depression in Late Life may be ordered from the Office of Medical Applications of Research, National Institutes of Health, Federal Building, Room 618, Bethesda, Maryland 20892 (301-496-1143). ■



Join us in a new kind of partnership ... uniting doctors, lawyers, teachers, parents, and youth against drug and alcohol abuse.

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Doctor/Lawyer/Teacher Partnership Against Drugs

Doctor's Day, March 30, 1993

As we commemorate Doctor's Day 1993, members of the Auxiliary to the Medical and Chirurgical Faculty of Maryland and its component auxiliaries offer special recognition to the following physicians for their dedication and service to medicine.

Maria Grazia Ascoli, M.D.
Nino Ascoli, M.D.
Fred J. Baker, M.D.
Alberto S. Barretto, M.D.
Jon Bellantoni, M.D.
Leo Bellantoni, M.D.
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Contributions to the Ameerican Medical Association Education and Research Foundation (AMA-ERF) have been made by the spouses, parents, and friends of the named physicians.

From the library staff

Dr. Miller's article provides a good overview of the library's growth since its founding in 1832. Drs. Fonerden and Baker as well as Marcia Noyes, who served as librarian for 50 years, would be amazed at the changes that have taken place.

Marcia Noyes was required to live in the Faculty building so she could promptly answer physicians' inquiries. Today, with the advent of the fax machine, modem, and on-line databases, the library is still available on a 24-hour basis. Whether inperson, over the telephone, or via computer, library staff respond efficiently to physicians' needs.

The Med Chi Library is staffed by three full-time professionals, including an individual responsible for reference/on-line searching functions. The library subscribes to 312 medical journals, including a majority of the journals listed in Abridged Index Medicus. *Holdings of over 110,000 volumes include a basic collection of recent publications in medical research, preclinical sciences, and the social, economic, legal, and administrative aspects of medical practice. A notable collection of rare medical books used by Maryland physicians since the founding of the state in 1632 is housed in the*

Continued on next page

The Library of the Medical and Chirurgical Faculty of Maryland

Doctors in the American colonies were poorly prepared for practice by apprenticeship. The traditional method of instruction was: "the teacher cites and the pupil recites," as medicine was taught by rote and observation. In addition, opportunity for instruction by reading after entering into practice was extremely limited. The earliest medical libraries were those established at the Pennsylvania Hospital in 1763 and at the New York Hospital in 1796.[1]

In the adolescent days of the Medical and Chirurgical Faculty of the State of Maryland, a few small privately owned collections of medical books existed, but they were not available for general use. The urge to teach themselves generated a fresh wind among the members of the Faculty at the annual meeting of 1830, as they realized that education and learning should not stop after the completion of medical school or an apprenticeship. Additionally, fees from the granting of licensure had accumulated in the previous 30 years, and several thousand dollars were available for expenditure. In 1799, the Maryland Legislature had stated "that the establishment and incorporation of a medical and chirurgical faculty or society of physicians in the said state will be attended with the most beneficial and salutary consequences by promoting and disseminating medical and chirurgical knowledge throughout the state."[2] This statement had remained unfulfilled until Dr. Samuel Baker of Baltimore offered a logical resolution at the annual meeting in 1830 to form a Library Committee and purchase standard works in medicine to be placed in a suitable location for members' use. After thorough discussion and a realization of the practicability and usefulness of the motion, it was carried out by the members present.[2–4]

Dr. John Fonerden was appointed librarian at a salary of 100 dollars per year, and a number of physicians contributed books to form the nucleus of the collection. In the initial stages, the library was probably located in the home of one of the doctors. In 1835, Dr. Samuel Chew was the librarian, and an announcement was made that the books could be found at his residence. Five years later, Dr. Chew moved the collection to his office at 88 North Howard Street, between Saratoga and Mulberry streets. From 343 volumes in 1832, the library had grown to 949 in 1840.

Actually, the library was in a traveling status without a real home, and its books were subject to loss in many ways. Pausing in a number of places for successively short stays, the book collection rested at the Maryland Bible Society, the office of Dr. Fonerden, and the rebuilt Athenaeum. A period of malaise was suffered in 1855 when books were not bought because of a lack of money, although the collection had grown to 1,250 volumes. At the an-

nual convocation in 1856, during a deep literary depression, a suggestion was made to give the library away, but, fortunately, the suggestion was not accepted.

The first real home of the Faculty was at North Calvert Street. Purchased in 1857, it had a second floor back room that was used as the library for 10 years, but, ultimately, the wandering began again. The move to Cortland Street in 1869 was unfortunate as the house was too small and the books were stored in unopened boxes for five years. Two different halls on Lafayette Street were used as temporary quarters when another crisis in the health of the library occurred. The Library Committee recommended the sale of the books and, in lieu of books, the formation of a collection of medical journals, hospital reports, and society transactions. The office of the surgeon general, through Dr. John S. Billings, offered to buy 100 of the better books, but reason prevailed again, and the collection was maintained intact.

With the move to North Eutaw Street in 1896, the haleness of the collection improved with the opening of the Frick Memorial Library. The expanding library quickly filled all available shelves. After relocation to Cathedral Street in 1909, the library continued to grow and now has over 100,000 volumes.

The "teen-age" years of the library were difficult to live through, but the fundamental commitment of the Faculty members led to a progressive growth not only in number of volumes but also in the influence and interest exerted by Faculty members. Drs. Baker and Fonerden would be amazed by the growth, sturdiness, and changing nature of their child.

In the late 1800s, Dr. John R. Quinan, a devoted lover of his profession, donated 100 volumes to the library. During this period, Dr. Eugene F. Cordell, an educator and professor of the practice of medicine, took an active part in nurturing the library. Busy as he was with his medical practice, he found time to be the librarian from 1870 to 1871 and from 1880 to 1887. (One of his major contributions to the history of medicine in Maryland was *The Medical Annals of Maryland. 1799-1899.*)

The contributions of Dr. William Osler to the library are often overshadowed by the tremendous medical aura surrounding him. A leader of American medicine during the time he was professor of medicine at the Johns Hopkins Medical School, he was keenly interested in the Med Chi Library. He missed the collection of books at the College of Physicians in Philadelphia and so set rapidly apace to refurbish what was a small, disorganized, and outdated library under the supervision of an unsuitable librarian. In 1889, the collection totaled less than 7,000 books. When he became president of the Faculty in 1896, Dr. Osler used the power of his office to improve the financial and operational existence of the library. He was fortunate in finding and hiring Miss Marcia C. Noyes, who was working at the Pratt Library, as the new librarian of the Faculty.[5–8]

Without doubt, Noyes created a great medical library and helped the Faculty in many ways as an operational assistant. She arrived in November 1896, just in time to celebrate the opening of the Charles Frick Reading Room in the new house on North Eutaw Street. One of the requirements for the position was that the librarian had to live in the same building, and this she did on Eutaw Street and later at Cathedral Street. Realizing the inadequacy of the North Eutaw Street site for all purposes, she became the driving force

Douglas G. Carroll History of Medicine and Rare Book Collection. This collection also includes manuscripts, medical instruments, prints, photographs, and paintings.

Access to medical information at Med Chi is enhanced by the library's automated information facilities. Med Chi owns the CDPlus CD-Rom MEDLINE database, which allows almost instantaneous access to more than seven million citations in medicine and the allied health sciences. The library also accesses BRS and Telebase, two of the world's largest database vendors.

Aside from strong medical journal holdings in-house, the library's document delivery services are complemented by access to two of the largest interlibrary loan/photocopy access databases in the world—DOCLINE and OCLC. Both DOCLINE and OCLC allow automated referral of interlibrary loan requests directly to libraries holding the journal or book title desired, allowing staff to minimize delivery time when the Med Chi Library does not own a given work.

If you are not familiar with the services the library offers, please call the library at 1-410-539-0872 or 1-800-492-1056.

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in a building campaign to produce the present home. Noyes became the Faculty secretary in 1904 and the executive secretary in 1925.

Because of their direct bearing on health, medical libraries, in general, have enjoyed an unusual growth. Knowledge of the scientific literature is an essential part not only of medical investigation but also of day-to-day patient care. The use of the medical library and its journals as teaching aids in continuing medical education thus has its roots in the 18th century.

The present-day medical library offers specialized collections for particular bodies of users. Trained in medial librarianship, the staff offer essential and personalized direction.

The card catalogue has been changed, and books are now classified using the National Library of Medicine system. Staff use an electronic storage and retrieval system to find desired items. Books and, more particularly, journals that are constantly in demand need not be removed from the environs as photocopying machines permit instant reproduction of wanted portions of text. The publications need never be removed from the site, allowing almost simultaneous use by others.

The phenomenal growth of the library of the Faculty also reflects the tremendous growth of bioscientific literature. In the 18th century, the world count of journals was about 300; a few decades ago, 300 abstracted journals were published; and at the present time, 300 data banks exist.[9] Warren estimates that more than 20,000 biomedical series are published annually.[10] The prime reason for this great burgeoning of the literature is the urge for educational enlightenment by colleagues in various branches of medicine.

The use of the Medical Literature Analysis and Retrieval System in a central location with access ports in individual libraries, as in the Faculty library, has permitted a giant step forward in the rapid acquisition and transmission of knowledge. Although readers still visit the library, much of the staff's activity is directed toward telephone response. A tremendous change has occurred since the library was open for only a few hours every week. The acquisition of a full-time librarian was a tremendous step forward in the growth and preparation for use of the book collection, and now a staff of trained individuals is prepared to serve the members of the Faculty.

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JOSEPH M. MILLER, M.D.

Dr. Miller is a retired surgeon from Timonium, Maryland. ■

Members in the News



H. LOGAN HOLTGREWE, M.D. was recently elected president of the American Urological Association. He is an assistant professor of urology at Johns Hopkins University and enjoys privileges at Anne Arundel Medical Center in Annapolis. Dr. Holtgrewe received his bachelor and medical degrees from Kansas University. His internship was completed at the Hospital of the University of Pennsylvania, and he was an assistant resident in general surgery at Duke University Hospital and a resident in urology at Kansas University. He also served as a medical officer in the US Navy Reserve. He is a member of numerous professional organizations in which he has held many offices. Dr. Holtgrewe has authored many journal articles, book chapters, and lectures.



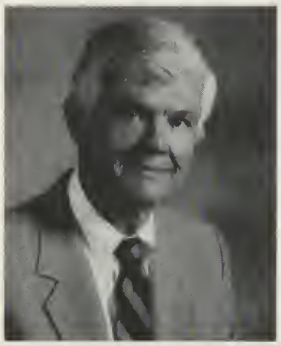
THOMAS E. HUNT, JR. M.D. has been installed as president of the Baltimore City Medical Society. Dr. Hunt, originally from Pittsburgh, received his medical degree from the University of Maryland School of Medicine and completed residency training in orthopaedics at the Johns Hopkins Hospital. He maintains a private practice in orthopaedic surgery in Baltimore and is on the staff of Johns Hopkins Hospital, Children's Hospital, and Mercy Medical Center. Dr. Hunt has served as a consultant to the Division of Children's Services for over 30 years, and is also an orthopaedic consultatant for Stella Maris Hospice and the Hopkins Prosthesis Clinic. — Other officers installed in the Baltimore City Medical Society with Dr. Hunt include Donald H. Dembo, M.D., president-elect; K. George Dritsas, M.D., vice president; Willarda V. Edwards, M.D., secretary; and Murray A. Kalish, M.D., treasurer.



ALLAN D. JENSEN, M.D. was elected to a position on the Board of Trustees of the American Academy of Ophthalmology (AAO). A director-at-large since 1991, Dr. Jensen will now serve a three-year term as secretary for federal affairs. He received his medical degree from the Johns Hopkins School of Medicine and his undergraduate degrees from Johns Hopkins University. He completed a residency in internal medicine at Union Memorial Hospital and a residency in ophthalmology at the Wilmer Eye Institute. Dr. Jensen also was an exchange resident at Khalili Hospital in Shiraz, Iran. Currently, Dr. Jensen is a solo practitioner in Baltimore and is a member of many professional associations.



THEODORE C. PATTERSON, M.D. was presented the Baltimore County Medical Association's second annual Physician's Community Service Award. Dr. Patterson received this award for making the community a better place in ways other than the practice of medicine. He received his medical degree from the University of Maryland School of Medicine, a graduate degree from Howard University in Washington, DC, and his undergraduate degree at Morgan State University. Dr. Patterson was raised in Sparrows Point and has practiced medicine in Dundalk since 1964. His community involvement includes positions on college boards, leadership in social service organizations, and participation in the field of education. Dr. Patterson's long and varied community service has earned him numerous awards, as well as the respect and admiration of the community of Dundalk.



JOHN W. PAYNE, M.D. was honored as recipient of the Baltimore City Medical Society's Community Service Award. Dr. Payne received the award primarily for his work as director of volunteer physicians at the Joseph Richey House, a 12-bed in-service hospice which serves terminally ill patients including AIDS patients, regardless of their ability to pay. In addition, Dr. Payne was medical director of the Maryland Eye Bank for many years and was one of the first physicians in the country to recognize the importance of quality control in eye banks. Dr. Payne received his medical degree from the Johns Hopkins University School of Medicine and then served as a captain in the US Army Medical Corps. Dr. Payne is a member of many professional and community organizations, and currently teaches four to five hours per week.



BRUCE E. RUBIN, M.D. has been named as a fellow of the American College of Radiology (ACR). Selected for his outstanding contributions to the field of radiology, Dr. Rubin was one of 144 new fellows named by the college's Board of Chancellors. After graduating from the City College of New York (CUNY), he received his medical degree from the College of Physicians and Surgeons, Columbia University. His internship and residency were completed in internal medicine at Mary Imogene Bassett Hospital in Cooperstown, New York. He also served a residency in diagnostic radiology and a fellowship in special procedures and computed tomography at the George Washington University Medical Center in Washington, DC. Dr. Rubin has a military background, has received professional recognition on many levels, and is a member of many professional societies.

JONATHAN M. SUTTON, M.D. has been named the medical director of Pathways, Anne Arundel Medical Center's chemical dependency program for adolescents and young adults. Since 1966 Dr. Sutton has been on the staff of Anne Arundel Medical Center and was chief of pediatrics for five years. He attended medical school at the Medical College of Virginia and completed his internship and residency at Baltimore City Hospital. He worked in pediatrics at Dover Air Force Base and had a private practice in Annapolis. His interest in the field of chemical dependency was sparked when he began working with the American Academy of Pediatrics' Committee on Substance Abuse in 1986. Dr. Sutton is a member of numerous professional associations as well as community councils. ■

Physicians and the press: Medicine's new image

Now more than ever, professional organizations representing physicians are concerned with image as seen by the public and policymakers. The American Medical Association (AMA) has launched a Strategic Communications Plan, including the addition of a New York public relations office and an expenditure of almost $3 million on print ads. The AMA has even launched a new magazine for subscription by the public.

Concern about bad press and a slump in the profession's public opinion rating (69% of the public said people were losing faith in doctors, up from 64% in 1989) helped mold this new policy, as well as a new tagline, "Physicians dedicated to the health of America."

But as Dr. James Todd, executive vice president of the AMA, said, "You can't buy an image. You've got to earn it." As spouses of physicians, we feel most perceptions about the profession are wrong. Doctors are not overpaid, golf-playing, test-ordering, callous, greed machines. They are human beings, very intelligent ones, who care about their patients, and who often work long hours with little or no compensation.

Reading the *Washington Post* health section on Tuesdays became an infuriating exercise. Physicians were portrayed as performing unnecessary procedures, only seeing those who could afford health care, and overbooking patients to wait in waiting rooms. To whom was the press talking to? Where did they get such ideas?

We contacted the *Post* and arranged a forum with distinguished columnists Victor Cohn and Sally Squires. They were joined by Neil Ravin, M.D., a local endocrinologist and columnist for the *Washington Magazine*, and Dee McKenzie, director of WTOP news radio's "Call For Action" program. The panel was moderated by Jeffrey Molter, director of Science News for the *Journal of the American Medical Association*, who came from the AMA's Chicago office **(Figure).**

More than 160 local physicians and their spouses listened as each speaker related experiences with the medical community. The journalists had numerous suggestions on how physicians could best communicate with the press:

- If you are interviewed by the press, ask the reporter to read back the notes after the interview. Call your local medical society for guidance before interviewing.
- Be aggressive. A reporter may need convincing, but guide him or her as to how the subject could be covered.
- Form two or three messages you want to get across, and repeat them several times during the interview. If the interviewer gets offtrack, pick up the messages again and repeat them.
- Fax some non-jargon articles that present ideas you agree with to local journalists along with a note saying you'd like to discuss it. (Victor Cohn of the *Post* is looking for physicians who can present their side, perhaps showing him how managed care is going to affect practice.)



Figure. From left are Jeffrey Molter, Sally Squires, Victor Cohn, Dee McKenzie, Anne Bolen, and Nancy Warren, who served on a panel discussion of physician relations with the media.

- Invite journalists to see just how many forms you must deal with on a daily basis.
- Be available to reporters. They can smell two things: anger and fear. If they believe you are fearful, they'll think you have something to hide.

The old adage of the press is "Good news is no news; bad news is good news—we print bad news." The press is a place for controversy, but there is no reason that it cannot work *for* the profession as well as against it.

Diane Briggs, executive director of the Prince George's County Medical Society, said of the meeting, "Having worked in public relations, I wasn't surprised at what the press had to say, but I was surprised at the anger expressed by some individual physicians during the audience's turn." Many physicians brought specific articles to discuss with the press. The journalists' reaction was "the squeaky wheel is the one that gets oiled." They suggested writing to the editorial page to start a dialogue on subjects physicians want addressed.

Ms. Briggs says Prince George's County has had great success keeping communication lines open with the journalists at the meeting. Two programs have been produced by WTOP radio from ideas submitted by the medical society, and the journalists have been added to mailing lists from Montgomery and Prince George's counties. Ms. Briggs urges medical society staffers and individual physicians to contact the press with ideas—they will be used if you continually follow up on them. Be persistent, and you will be heard.

Overall, the meeting was productive and positive. The physicians came away with a greater awareness of reasons patients had been reading so many negative views of physicians, and the press saw and heard the physicians. Now it is up to those of us at local and state levels to keep those communication lines open and develop others. Perception is reality, and your patients and policymakers are reading, watching, and listening to the press. Medicine can present its side, but no one is going to come look for it.

If you have an idea to pass along, contact your local health or medical editor, the community affairs director of your medical society, or your local news station. They are hungry for stories, and it might as well be yours.

ANNE BOLEN
President, Montgomery County Auxiliary

NANCY WARREN
President, Prince George's County Auxiliary ■

MARYLAND

The Auxiliary always welcomes new members.

Auxiliary members support the physicians and are recognized for their contributions to health, education, and the promotion of quality health care in Maryland.

For information on becoming a member, call JoAnn Troisi at Med Chi's Auxiliary office.
539-0872 (Baltimore area)
1-800-492-1056 (toll free in MD)

MARYLAND HYGEIA FILIAE AMCF

In Memoriam

Nachman Davidson, M.D.,

NACHMAN DAVIDSON, M.D., 82, died December 17 of Alzheimer's disease. He was an allergist, adjunct instructor at the Johns Hopkins medical school, and a navy veteran of World War II. Born in Baltimore, Dr. Davidson graduated from Baltimore City College, Lehigh University, and the University of Maryland School of Medicine. He then entered the navy and attained the rank of lieutenant commander. Following his navy career, he completed a two-year internship followed by studies in allergies at the Johns Hopkins University under a fellowship. In addition to private practice, Dr. Davidson also worked at outpatient clinics at Johns Hopkins, Sinai, and Lutheran hospitals. He was involved with the Guidance Service, a pioneering community mental health project operated with a parent teacher association, and was a charter member of Maryland's Department of Motor Vehicles Medical Advisory Board.

Elie K. Fraijl, M.D.

ELIE K. FRAIJI, M.D., a general surgeon in private practice in Baltimore, died of cancer on December 4 at the age of 62. A native of Lebanon, Dr. Fraiji received his early education in Zahle and Beirut. After graduating from the University of Science in Montpellier, France, he attended the Medical School of the University of Tours and then later, the Medical School of the University of Paris, from which he graduated. Dr. Fraiji then moved to Baltimore and served a residency at St. Agnes Hospital, becoming chief surgical resident. He remained active at St. Agnes Hospital, serving as a member of the executive committee of the staff, coordinator of the surgical training program, secretary, and treasurer. He also maintained an office in the Seton Professional Center.

Harry C. Hull, M.D.

HARRY C. HULL, M.D. died of congestive heart failure on December 15. Dr. Hull, 83, was a retired general surgeon who taught at the medical school and hospital of the University of Maryland for many years. He was born in Adamstown, attended public schools in Frederick, and the Franklin and Marshall College in Lancaster, Pennsylvania. He received his medical degree from the University of Maryland School of Medicine and served internships and residencies at St. Agnes and University of Maryland hospitals. Dr. Hull was a member of the staff of the University of Maryland and Maryland General hospitals, and a consultant to the United States Public Health Service Hospital. He traveled to the Far East and to Amman, Jordan. In 1963, he operated on the Jordanian prime minister, an uncle of King Hussein, and was awarded the Star of Jordan for his work there.

Donald J. Roop, M.D.

DONALD J. ROOP, M.D., 76, died December 19 of congestive heart failure. Dr. Roop was retired director of the Baltimore County Health Department. He graduated from Western Maryland College and the University of Maryland School of Medicine. He served his internship and residency at Mercy Hospital. He later attended Johns Hopkins School of Hygiene and Public Health where he earned a degree in public health. Dr. Roop also had a degree in tropical medicine from Walter Reed Hospital in Washington. He served in the US Army/Air Force and then practiced medicine in Frederick County with his father. He served as health officer for Frederick County before moving to Baltimore County to serve as assistant health officer, and later county health officer and director of the health department.

Sarah S. Tenenblatt, M.D.

SARAH S. TENENBLATT, M.D., a retired psychiatrist, died of a heart attack on November 17 at the age of 72. A native of Vladivostok, Russia, she was raised in Shanghai, and moved to California when she was 17. She received her undergraduate and medical degrees from the University of California at Berkeley. She served internships at hospitals in San Francisco before moving to Washington for a residency at St. Elizabeth's Hospital. She was on the staff of St. Elizabeth's during her early career. Later, Dr. Tenenblatt had a private practice in Silver Spring, and was an assistant professor of psychiatry at George Washington University Medical School. She was an officer and member of many professional organizations throughout her career.

No information was available at press time for the following members:

Robert W. Garis, M.D. (Baltimore), November 29, 1992

Daniel L. Hayes, M.D. (Montgomery), November 16, 1992

John W. Machen, M.D. (Baltimore), January 4, 1992

Milos B. Radwick, M.D. (Baltimore),

Henry L. Spiegelman, M.D. (Affiliate), November 24, 1992 ■

WELCOME!

The Medical and Chirurgical Faculty of Maryland welcomes the new members listed below. They join an organization with a 194-year history of dedicated service to improving the health and welfare of the people of Maryland. With the help and expertise of longtime members and the participation and input of new members, Med Chi can continue its proud tradition of ensuring quality health care.

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Quality improvement and the hospital library

On Thursday April 8, 1993

The Maryland Association of Health Sciences Librarians (MAHSL) will offer a continuing education course entitled "Continuous Quality Improvement and the Hospital Library."

The course will be conducted by Chris Jones, a member of the Information Management Task Force of the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). Cost is $50 for MAHSL members and $75 for non-MAHSL members. Enrollment is on a first-come, first-served basis.

The course is scheduled to be held at the Medical and Chirurgical Faculty building from 8 am to 5 pm. To join MAHSL or to register for the course, call Myra Binau at Washington County Hospital (410-790-8801). For more information, call Kathy Curry at 410-532-3891.

Directory Changes

The Med Chi membership directory is published annually. It lists, by county, the addresses, phone numbers, specialties, board certifications, and specialty society affiliations of all Med Chi members. This update provides the most recent changes.

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The Maryland Medical Journal (MMJ) *is a monthly publication of the Medical and Chirurgical Faculty of Maryland. The journal's goals are educational and informative: the publishing of scientific articles (original research, case studies, and review articles) and other technical information, as well as editorials, letters, special articles (evaluations, position papers, reviews of nonscientific subjects), membership and legislative news, continuing medical education notices, and programs and policies of the faculty.*

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  The letter should include a statement to the effect that all authors have participated in the conception and design of the work and in the writing of the manuscript, and that they take public responsibility for it. The authors should attest to the validity and legitimacy of the data, and acknowledge that they have reviewed the final version of the manuscript and approve it for publication.

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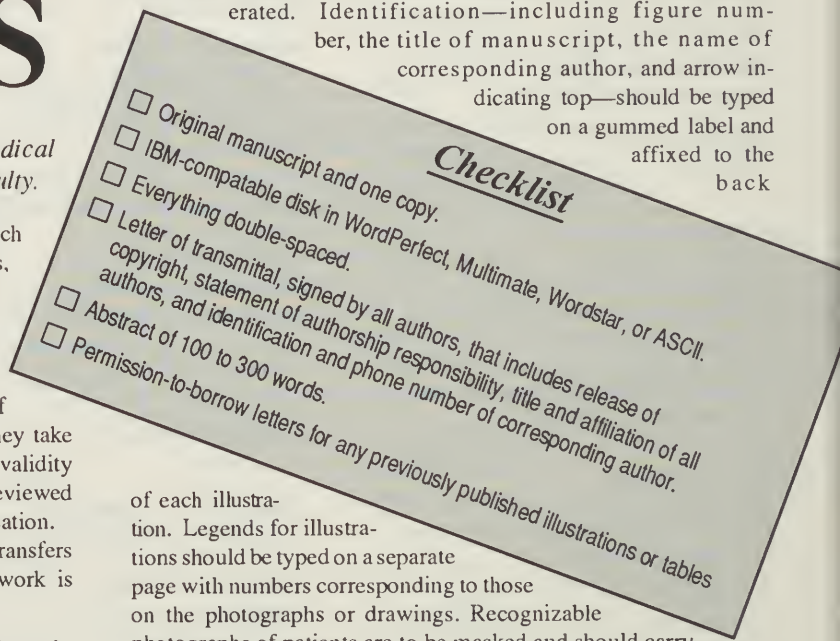
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- ***References***—References are limited to those citations noted in the text. References should be numbered consecutively as they appear in the text and should be kept to a minimum (fewer than thirty-five). Personal communications and unpublished data are not acceptable. At a minimum, references should include names of all authors, complete title of the article cited, name of journal abbreviated according to *Index Medicus* (if abbreviation is not known, journal name should be spelled out fully), year of publication, volume number, and first and last page numbers. Sample references are as follows:

  1. Stevens MB. The clinical spectrum of SLE. Md Med J 1991; 10:875–85.
  2. Ropes MW. Characteristics, manifestations, and pathologic findings. In: Ropes MD, ed. Systemic Lupus Erythematosus. Cambridge, MA: Harvard University Press. 1976; 50–4.

- ***Tables***—Tables should be typed on separate sheets of paper, be numbered, and have a brief descriptive title. Data presented in tables should be self-explanatory and should supplement, not duplicate, the text; the Editor reserves the right to edit tables. Authors should be sure that statistics are consistent in both tables and text.

- ***Illustrations***—Illustrations include material that cannot be set in type. Photographic material must be submitted as high-contrast, glossy prints. Drawings and graphs must be done professionally in india ink on high-grade white drawing paper or be computer generated. Identification—including figure number, the title of manuscript, the name of corresponding author, and arrow indicating top—should be typed on a gummed label and affixed to the back of each illustration. Legends for illustrations should be typed on a separate page with numbers corresponding to those on the photographs or drawings. Recognizable photographs of patients are to be masked and should carry with them written permission for publication. Cost of printing color photographs must be borne by the author.



- ***Permissions***—Material taken from other sources must be accompanied by written permission from both author(s) and publisher allowing the *MMJ* to reproduce the information/figure.

- ***Editorial responsibility***—All manuscripts are acknowledged upon receipt. They are subject to peer review by an editorial board and, at times, by guest reviewers in appropriate fields of medicine, to determine the originality, validity, and importance of the content and conclusions. Authors are usually notified of the status of their papers (acceptance, revision, or rejection) within 4 to 8 weeks of receipt; however, longer delays are sometimes unavoidable. Reviewers' comments will be returned with rejected manuscripts at the discretion of the Editor. All guest reviewers will remain anonymous.

  Accepted manuscripts become the permanent property of the *MMJ* and are subject to copy editing. (The *Chicago Manual of Style* and the unabridged *Random House Dictionary of the English Language* are used as style guides.) The corresponding author is sent a reprint order form and galley proofs. S(he) then has 48 hours in which to make minor changes and clear all corrections and changes with co-authors; if proofs are not returned by the specified date, they will be considered approved as typeset. ■

The Johns Hopkins Medical Institutions

All courses at the Thomas B. Turner Building unless otherwise indicated. For information on continuing medical education activities, contact the Office of Continuing Education, 720 Rutland Ave., Baltimore, MD 21205 (410-955-2959).

PET and SPECT brain imaging in clinical practice and research. 18 Cat 1 AMA/PRA credits. Fee: $495 physicians; $395 residents, fellows, and allied health professionals. Info: Patty Campbell, 410-955-6046 or Julia Buchanan, 410-955-8582. — **Mar. 10–12**

Spectrum of developmental disabilities XV: PL 94–142; PL 99-457—Issues of concern. 20 Cat 1 AMA/PRA credits. Fee: $425. — **Mar. 15–17**

Biological response to orthopaedic implants, at the Marriott Inner Harbor Hotel, Baltimore, MD. Cat 1 AMA/PRA credits available. Fee: $200 physicians; $125 residents and fellows. — **Mar. 19—20**

Problems in the diagnosis and management of the dysphagic patient: Transatlantic perspectives, at the Stouffer Harborplace Hotel, Baltimore, MD. Cat 1 AMA/PRA credits available. Fee: $425 physicians; $245 residents and allied health professionals. — **Mar. 29–30**

Diagnosis and treatment of neoplastic disorders, medical surgical, and radiotherapeutic aspects. 14.5 Cat 1 AMA/PRA credits. Fee: $300; $125 physician-in-training. — **Apr. 1–2**

Current concepts in thyroid disease: Update 1993. Cat 1 AMA/PRA credits available. Fee: $150 physicians; $40 residents and fellows. — **Apr. 16**

20th annual pediatric trends. 45 Cat 1 AMA/PRA credits. Fee: $625 physicians; $375 residents and fellows. — **Apr. 19–24**

34th annual postgraduate institute for pathologists in clinical cytopathology. Course A: Home study, March-April 1993. Course B: Lecture series with laboratory studies. 140 Cat 1 AMA/PRA credits. — **Apr. 19–30**

Clinical care of the patient with HIV infection, at the Stouffer Harborplace Hotel, Baltimore, MD. 13 Cat 1 AMA/PRA credits; 12.75 AAFP credits. Fee: $325 physicians; $165 residents, fellows and allied health professionals. — **Apr. 22–23**

Principles and practice of clinical MRI, at the Stouffer Harborplace Hotel, Baltimore, MD. Cat 1 AMA/PRA credits available. — **Apr. 22–25**

XII international papillomavirus workshop, at the Hyatt Regency Hotel, Baltimore, MD. 30 Cat 1 AMA/PRA credits. Fee: $400 prior to June 30, 1993; $450 after June 30, 1993. Info: Gretchen Shelton, 410-931-8108. — **Apr. 22–25**

Pediatric allergy and immunology for the practitioner. Cat 1 AMA/PRA credits available. — **May 6–7**

New frontiers in atherosclerosis and lipoprotein metabolism. Cat 1 AMA/PRA credits available. Fee: $200. — **May 13–14**

6th summer institute in environmental health studies. Info: Dr. Jacqueline Corn or Linda Lamb, 410-955-2609. — **June 7–18**

Continuously throughout the year

Visiting preceptorship in pediatric critical care medicine. Ongoing five-day preceptorship by appointment. 40 Cat 1 AMA/PRA credits. Fee: $600.

The department of radiology and radiological sciences offers several courses in abdominal and obstetrical ultrasound. Info: P. Williams, 410-955-3169.

Visiting physicians. Offered throughout the year for experience in the lab and participation in read-in sessions; by appointment only. 40 Cat 1 AMA/PRA credits. Fee: $500.

Johns Hopkins medical grand rounds. Accredited audiovisual continuing education series of case discussions for clinicians; thirty topics per year in five bimonthly programs. Individual and group subscriptions. 40 Cat 1 AMA/PRA credits. Info: 410-955-3988.

University of Maryland

For each course, additional information may be obtained by contacting the Program of Continuing Education, University of Maryland School of Medicine, Room 14-011, BRB, 655 W. Baltimore St., Baltimore, MD 21201 (410-328-3956) or by calling the phone number listed after a specific program. FAX 410-328-3103.

Advanced trauma life support, sponsored by the Maryland Institute for Emergency Medical Services Systems, in Baltimore, MD. Info: Office of International Development, 410-328-2399. **Mar. 10–11**

Managed care and quality improvement: Making a difference, sponsored by the Maryland Institute for Emergency Medical Services Systems, in Baltimore, MD. Info: Office of International Development, 410-328-2399. **Mar. 11**

Alcohol and trauma care, sponsored by the Maryland Institute for Emergency Medical Services Systems, in Baltimore, MD. Info: Office of International Development, 410-328-2399.1 **Mar. 11**

R. Adams Cowley 15th national trauma symposium, sponsored by the Maryland Institute for Emergency Medical Services Systems, at the Hyatt Regency Baltimore, in Baltimore, MD. Info: Office of International Development, 410-328-2399. **Mar. 12–14**

Infectious diseases in everyday medicine—3rd annual symposium, at the Baltimore Convention Center, Baltimore, MD. 12.75 Cat 1 AMA/PRA credits. Fee: $175 physicians before 4/1/93, $200 after 4/1/93; $100 allied health professionals before 4/1/93, $125 after 4/1/93; $50 fellows, residents and students before 4/1/93, $75 after 4/1/93. Info: Eunice Katz, 410-706-7560. **Apr. 19–20**

Continuously throughout the year

Visiting professor program. A directory of speakers and their topics is available to area hospitals and other health care organizations. NO administrative fees are charged for this service. Info: 410-328-3956.

Visiting fellowship in interventional radiology. Five-day practicum for radiologists, including conferences, patient rounds, and laboratory observations. By appointment only. 40 Cat 1 AMA/PRA credit. Fee: $1,200.

Ultrasound: Preceptorships. For physicians or sonographers with six-months' experience in practicing ultrasound. By appointment only. 40 Cat 1 AMA/PRA credit. $500.

Departmental rounds and conferences. Weekly, hands-on, and lecture presentations hosted by the university's clinical departments. Hour-for-hour Cat 1 AMA/PRA credits available. Brochure available.

Pediatric grand rounds. Every Thursday from September to June, except third Thursday, in the R. Adams Cowley Shock Trauma Auditorium. Info: Bonnie Winters, 410-328-6777.

Miscellaneous meetings

Future relationship between community and university hospitals, sponsored by the Baltimore City Medical Society, at the Union Memorial Hospital, Baltimore, MD. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. **Feb. 4**

The cost of medicine in the future, sponsored by the Baltimore City Medical Society, at the University of Maryland Westminster Hall. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. **Mar. 4**

Clinical dilemmas in pulmonary practice, sponsored by the American Lung Association of Maryland and the Maryland Thoracic Society. 7 Cat 1 AMA/PRA credits. Info: Anne Eder, 410-560-2120 or toll-free in MD, 800-492-7527. **Mar. 7**

Headache in the decade of the brain symposium, presented by the Comprehensive Headache Center at the Germantown Hospital and Medical Center in Philadelphia, PA. 6 Cat 1 AMA/PRA credits. Info: 215-951-8926. **Mar. 27**

Laboratory workshop in breast reconstruction, at the Sentara Norfolk General Hospital, Norfolk, VA. Info: 804-446-6140.	**Mar. 25–27**
Hands-on workshop on advanced diagnostic methods in andrology, at the Jones Institute of Reproductive Medicine, Norfolk, VA. Info: 804-446-6140.	**Apr. 8–9**
Thrombolysis: Its role in peripheral, arterial and venous disorders, at the Omni International Hotel, Norfolk, VA. Info: 804-446-6140.	**Apr. 23**
195th annual meeting of the Medical and Chirurgical Faculty of Maryland, at the University of Maryland Center of Adult Education, College Park, MD. Info: Betsy Newman, 410-539-0872 or 1-800-492-1056.	**Apr. 29–May 1**
Practical aspects of forensic medicine, sponsored by the Baltimore City Medical Society, at the Montebello Rehabilitation Hospital, Baltimore, MD. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022.	**May 6**
Practical dermatology for the primary care physician—19th edition, at the Ritz-Carlton Hotel, Pentagon City, VA. Info: 804-446-6140.	**May 6–9**
Virginia Society of Otolaryngology-HNS annual meeting, at the Tides Inn Resort, Irvington, Virginia. Info: Donna Scott, 804-353-2721.	**May 7–8**
Clinical auscultation of the heart, sponsored by the American College of Cardiology, at the Georgetown University Medical Center, Washington, DC. 18 Cat 1 AMA/PRA credits. Info: 800-257-4739.	**May 12–14**
Central Atlantic Seminar in Anesthesiology, sponsored by the George Washington University Medical Center, in Washington, DC. Info: John F. Vargo, 202-994-4285.	**May 13–16**
Maryland Academy of Family Physicians 45th annual meeting and scientific session, at the Princess Royale Oceanfront Hotel and Conference Center, Ocean City, MD. Cat 1 AMA/PRA credits; 41.25 AAFP prescribed hours. Fee: $240 members; $275 nonmembers; 135 paramedicals; No charge for residents, medical students, MAFP retired and life members. Info: Francis C. Bruno, M.D., 410-747-1980.	**May 18–23**
6th annual trauma anesthesia and critical care symposium, sponsored by the International Trauma Anesthesia and Critical Care Society (ITACCS) and Multinational Academic Consortium, at the Hyatt Regency, Baltimore, MD. Info: Kimberly C.A. Unitas, 410-328-2399.	**May 20–22**
Virginia Society of Ophthalmology annual meeting, at the Norfolk Marriott Waterside, Norfolk, VA. Info: Donna Scott, 804-353-2721.	**May 21–22**
Ethics of death and dying in the young person, sponsored by the Baltimore City Medical Society. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022.	**June 3**
9th annual Eastern Virginia Medical School family medicine review course, at the Cavalier Hotel, Virginia Beach, VA. Info: 804-446-6140.	**June 6–11**
Substance abuse care for primary care physicians: An overview of treating the substance abusing patient, sponsored by Med Chi, at Mercy Medical Center, Baltimore, MD. 1 Cat 1 AMA/PRA credit. Fee: None. Info: Carmine Valente, Ph.D., 410-539-0872 or 800-492-1056.	**June 9**
Board review in family practice, sponsored by the George Washington University Medical Center, in Arlington, VA. Info: John F. Vargo, 202-994-4285.	**June 12–16**
INMEDs fourth annual millennium conference, sponsored by the International Medical Services for Health (INMED) and the Tulane University School of Public Health and Tropical Medicine, Sheraton City Centre Hotel, Washington, DC. Info: 703-444-4477.	**June 15–18**
11th summer symposium in internal medicine, at the Fort Magruder Inn & Conference Center, Williamsburg, VA. Info: 804-446-6140.	**June 25–27**
16th annual flap dissection workshop, at the Virginia Beach Conference Center. Info: 804-446-6140.	**July 6–10**

14th International congress of lymphology, sponsored by the International Society of Lymphology (ISL). Part 1: "Frontiers in Lymphology" at the Hyatt Regency, Baltimore, MD. Part 2: "Lymphology in 1993" at the Ramada Renaissance Techworld, Washington, DC. Info: Grace Wagner, Program Coordinator, 602-626-6118. **Sept. 20–26**

Causes of the medical malpractice crisis, sponsored by the Baltimore City Medical Society. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. **Oct. 7**

Continuously throughout the year

Fluorescein angiography conference, sponsored by the Retina Center, St. Joseph Hospital, Baltimore, MD, first and third Mondays of each month; 8:00-9:00 a.m. Fee: none. Info: R. Classon, 410-337-4500.

Shady Grove Adventist Hospital,

9901 Medical Center Drive, Rockville, MD. Info: 301-279-6115.

Documentation for DRGs	**Feb. 4**
Endometriosis in the 90s	**Feb. 11**
Title III of the Americans with Disabilities Act: Impact on physicians	**Feb. 18**
Tumor conference	**Feb. 25**

PHYSICIAN'S RECOGNITION AWARD

During December 1992, the physicians listed below received the American Medical Association's (AMA's) Physician's Recognition Award. Established in 1968, the award's purpose is to encourage physician participation in continuing medical education and to recognize those physicians who have voluntarily completed programs of continuing medical education.

Alan Marc Davick
Ceferina S. De La Paz
Gordon Homer Earles
Eugene Guazzo
Christian Edward Jensen
Walter Taylor Johnson
Gary Wayne London
Michael Parnell McGrail
Hollis Seunarine
Robert B. Shearin
Jerome Michael Shier
Gary Scott Staples
Robert Frederic Stephens
Stanley Irving Wolf

William Donald Schaefer - Governor of Maryland

DHMH Maryland Department of Health & Mental Hygiene

Nelson J. Sabatini - Secretary
Department of Health & Mental Hygiene

J. Mehsen Joseph, PhD - Director
Community Health Surveillance & Laboratories Admin.

Ebenezer Israel, MD, MPH- Director
Epidemiology & Disease Control Program

EPIDEMIOLOGY & DISEASE CONTROL PROGRAM
201 W. Preston Street, Baltimore, Maryland 21201 (410)225-6700

February, 1993

Questions and Answers about Tuberculosis

In 1991, 26,283 cases of tuberculosis (TB) were reported in the United States. This reflected an increase of 2% above the number of cases for 1990. In Maryland, 451 cases of TB were reported in 1991 which represents a 17% increase over the previous year.

Between 1950 through 1984, TB cases in the United States declined between 5-7% per year. Between 1985 and 1991, however, this trend was reversed and TB cases began to increase. There were an estimated 39,000 cases of TB over the number expected during that period. The increase is attributed to the occurrence of TB among persons with human immunodeficiency virus (HIV) infection, injectable drug users, immigrants from countries where TB is endemic, sheltered homeless, and residents of institutions.

It is the aim of this document to provide answers to the most commonly asked questions about TB.

Q. When should a hospitalized patient with tuberculosis disease be placed in isolation? What kind of isolation is appropriate?

A. It is essential that a hospitalized or institutionalized patient be placed in "acid fast bacilli (AFB) isolation" while the patient is being worked up for suspected tuberculosis. The key to making the diagnosis of TB in a timely manner is to suspect the disease in any person with signs or symptoms compatible with the disease.

Control measures include having the patient cover the nose and mouth when coughing or sneezing. In addition, persons with symptoms consistent with clinically active infectious TB should be placed in an AFB isolation room before the diagnosis is certain, until there is objective evidence that they are unlikely to be contagious. Air from adjacent rooms and corridors must flow into AFB isolation rooms (negative pressure), and exhaust air must not be recirculated to other rooms or corridors or vented outside to sites near air intake systems. Six air changes per hour, at least two of which are outside air, have been recommended for AFB isolation rooms.

Q. What are the symptoms of TB?

A. Among the clinical findings that suggest TB disease are cough, hemoptysis, weight loss, fatigue, night sweats, and unexplained fever.

Q. How do you perform a Mantoux test?

A. 0.1 ml of PPD (purified protein derivative) is injected into the volar surface of the forearm. The use of a skin site free of lesions and away from veins is recom-

mended. The injection is made using a one-quarter to one-half inch, 27-gauge needle and a tuberculin syringe. The PPD should be injected intradermally, just beneath the surface of the skin, with the needle bevel upward. A discrete, pale elevation of the skin (a wheal) 6 to 10 mm in diameter should be produced when the injection is done correctly. If it is recognized that the first test was improperly administered, another test dose can be given at once, selecting a site several centimeters away from the orginal injection.

Q. How are the results of a Mantoux tuberculin skin test read and interpreted?

A. The skin test reading is the size of induration determined by inspection of the skin test site (from a side view against the light as well as by direct light) and by palpation. The diameter of induration should be measured transversely to the long axis of the forearm and recorded in millimeters.

Persons who have induration following intradermally injected PPD may be infected with *M. tuberculosis* or may be infected with mycobacteria other than *M. tuberculosis*. Cross-reactions to other mycobacteria commonly occur in many parts of the world.

Because of these possible cross-reactions, a set of definitions has been established for a "positive tuberculin reactor:"

- Five or more millimeters of induration is called a positive tuberculin test for 1) persons with radiographic or clinical evidence of tuberculosis, 2) close contacts to cases of tuberculosis, 3) immunosuppressed or HIV-infected persons, and 4) children under 1 year of age.
- Ten or more millimeters of induration is called a positive tuberculin test for 1) foreign born persons from high prevalence countries (e.g., Asia, Africa, Latin America), 2) injectable drug users known to be HIV seronegative, 3) residents of nursing homes, correctional institutions, or other institutional facilities, 4) persons with silicosis, diabetes mellitus, chronic renal failure, lymphoma, weight 10% or more below ideal body weight, or prolonged high-dose corticosteroid or immunosuppressive therapy.
- Fifteen or more millimeters of induration is considered a positive skin test for all persons not included above.

Q. What is TB infection?

A. People who have TB infection have a positive reaction to the tuberculin skin test, negative bacteriologic studies (if done), and no clinical or radiographic evidence of tuberculosis disease. These people would be unaware of their infection by *M. tuberculosis* without benefit of a tuberculin skin test since they are asymptomatic.

Q. What do Maryland regulations require of a person with TB disease?

A.The Code of Maryland Regulations (COMAR) 10.06.01.22 Communicable Diseases--Tuberculosis requires that the control of a case of tuberculosis includes adequate chemotherapy, medical supervision, and appropriate instructions for control. Regulations further state that a health officer shall place in isolation a person having tuberculosis in a communicable stage who refuses to observe the instructions and exposes others to infection.

Q. What drugs should be used to treat tuberculosis?

A. Currently, the accepted regimen is an initial course of daily isoniazid (INH), rifampin (RIF), pyrazinamide (PZA), and ethambutol (EMB) for 2 months (induction phase), followed by INH and RIF for four months (continuation phase), for a total duration of 6 months of therapy in the absence of HIV infection. Streptomycin (SM) can be used in place of EMB in the initial regimen; however, SM is currently available only through the CDC. Drugs given in the continuation phase can be given twice weekly if every dose is directly observed.

Patients who have TB disease due to drug-resistant organisms, who have coexisting HIV infection, or who are unable to take one or more of the previously listed drugs will require a longer duration of therapy and may require different or additional drugs. All patients with TB should be offered appropriate HIV-antibody counseling and testing.

With adequate chemotherapy, almost all patients with organisms susceptible to the primary antituberculous drugs (INH, RIF, PZA, EMB, and SM) will become bacteriologically negative, recover, and remain well.

Q. What is multi-drug-resistant TB?

A. Multi-drug-resistant TB (MDRTB) is an emerging problem especially in those with TB-HIV coinfection. It is defined as resistance to at least INH and RIF, the two best anti-TB drugs. The principle of therapy for MDRTB is to treat with multiple drugs to which the organism is susceptible. The recommended initial regimen of INH, RIF, PZA, and EMB provides adequate coverage for most MDRTB while sensitivities are pending.

Q. What is the treatment regimen for drug-resistant cases of tuberculosis?

A. The main principle of therapy for drug-resistant TB disease is treatment with multiple drugs to which the organism is sensitive. Treatment for TB due to drug-resistant organisms may be more difficult, more toxic, more expensive, and not as successful as drug-sensitive organisms, depending on the drug resistance pattern. The Maryland DHMH, Epidemiology and Disease Control Program, Division of Tuberculous Control, has a contract with a pulmonologist to review the case history, treatment, and chest X-ray of each drug-resistant case of TB in Maryland to assure the adequacy of the regimen. There is no charge to the patient for these services.

Q. How should patients be followed during therapy?

A. Patients should be followed by inquiring about the resolution of their symptoms, and by obtaining first morning sputum specimens for AFB smear and culture on three consecutive mornings each month until culture results are negative. Patients should be monitored for drug reactions.

Q. How should failure to respond to therapy be recognized and treated?

A. Failure to respond can be recognized by:

- Lack of decreasing counts on smears;
- Persistently positive sputum cultures;
- Failure of symptoms to improve; and
- Worsening chest X-ray.

Causes of failure to respond include:

- Failure to treat with drugs to which the organism is sensitive;
- Failure of the patient to take the prescribed medications (may include drug intolerance, drug expense, recalcitrance, etc.); and
- Failure to absorb the medications.

Problems caused by failure to respond include worsening disease in the case patient, and continued transmission of TB. All cases of failure to respond should be thoroughly investigated and the need for restriction of activities should be reevaluated on a case-by-case basis.

Q. How can non-compliance be avoided?

A. Health care providers must promote compliance so that persons with infectious tuberculosis do not transmit infection.

Below are factors that, if recognized, may help providers improve patient compliance:

- The patient must perceive that the end result is important (treatment will cure a deadly disease);
- The patient must be capable of performing the task (i.e., taking a large number of pills daily);
- The patient must perceive the benefits from completing therapy (i.e., reduc-

tion in symptoms, not infecting family members); and

- The patient must incorporate the tasks into daily routines (e.g., coming to clinic for directly observed therapy).

Q. What is the role of the Maryland State TB Control Division?

A.The Division of TB Control in the Epidemiology and Disease Control Program of DHMH, in conjunction with local health departments, provides ongoing TB inservices and updates. Skin testing and interpretation certification is provided on request as well as annually on a regional basis for practitioners from both the public and private sectors, and correctional systems.

Medical consultation is provided to both public and private medical communities.

The Division of TB Control collects data from all 24 jurisdictions in Maryland. These data are analyzed to determine patients' response to therapy, and provide supervision of therapy whenever necessary. Data are computerized and aggregate state data are shared with the CDC for collating with the other states' data into national trends.

Also, the Division develops TB policies and procedures. Diagnostic and treatment services are made available at the local health departments through financial grants from the State. The State provides medications and free laboratory services.

Q.Where can a patient obtain "free" medication for treatment of tuberculosis disease?

A. A patient requiring medication for treatment of TB who does not have the means to purchase TB drugs, can obtain medications free of charge from their local health department. If the client has a third party prescription card or medical assistance prescription card, a reimbursement request will be generated.

Q. What TB services are available from the health department for the private client?

A. Cooperative efforts include free sputum examination, blood chemistries related to suspected adverse drug reaction, monitoring for drug reaction, and ongoing bacteriological follow-up.

The clinician may refer the patient for any or all of these services or for management of the entire TB treatment while still remaining the patient's primary medical care provider.

In the event that the clinician and patient choose to use the local health department services, a case update/medical monitoring form will be sent to the clinician every two months, until therapy is completed.

Q. What should a clinican do if the patient with TB disease is not-compliant?

A. The physician should report the patient to the local health department; the health department will assist in locating and monitoring non-compliant patients.

Q. What is BCG and what role, if any, does it play in tuberculosis?

A. BCG stands for the bacillus of Calmette and Guerin. Calmette and Guerin were two French scientists who serially subcultured a strain of *M. bovis* every three weeks for a period of 13 years (1906-1919). Two hundred thirty subcultures later, they found they had produced a significantly changed acid-fast bacterium that had retained its immunogenicity and was capable of sensitizing an animal or a person to tuberculin without causing the disease.

When BCG vaccine is injected into the body, the organisms multiply, and cause sensitization to mycobacteria. If the body is later exposed to an inhaled virulent *M. tuberculosis*, the previously sensitized immune system can inhibit its multiplication and spread. The beneficial effect of partial immunity may reach a maximum level in the first three years after vaccination, but may possibly persist for nine years. Observed immunity against *M. tuberculosis* varies between 80 percent and no beneficial effect at all.

Reminder:

Report all cases of suspected or confirmed tuberculosis to your local health department.

We Need A Doctor In The House

When the Maryland General Assembly convenes in Annapolis for its 1993 session, the Medical and Chirurgical Faculty will be there. Since 1964, Med Chi has staffed the first aid facility operated during the 90-day legislative session. Come join us at the state capitol building, and see the laws being made first hand. One doctor a day is all that is needed to care for the public, the legislators, and their staffs. Take advantage of the opportunity to donate something priceless, your time.

Please detach the postcard located at the top of this page, fill it out and mail it. A confirmation card will be sent to you explaining the details. You will be carrying on a tradition established by the medical community for the people of Maryland.

Doctor of the Day 1993



Note: All Monday dates are evening sessions, beginning at 4:00 p.m. and ending at 5:00 p.m. For more information, call Joyce Yensen at Med Chi's Legal Department, 410-539-0872 or call toll free in Md. at 1-800-492-1056.

Your time can make a difference.

Performing Arts Medicine II: Focus on Young Performers

A conference presented by the Committee on Medicine and the Performing Arts of the Medical and Chirurgical Faculty of Maryland

The second annual conference on performing arts medicine will advance the knowledge of health care professionals, performers, and educators regarding health problems faced by musicians, vocalists, and dancers. The program will emphasize care of student performers. The conference will consist of thirteen presentations and a short recital. The lectures will include audio-visual aids and, in several cases, performer demonstrations.

March 20-21, 1993
Med Chi Faculty Building
1211 Cathedral St.
Baltimore, MD

This conference is designed to educate physicians, both specialists and primary care practitioners, about the health and training problems faced by student performers during their secondary, college, and graduate training. They will learn to recognize problems of artists, some of which are unique to performers or have special occupational consequences. Various means of diagnosis, treatment, and rehabilitation will be presented. Special attention will be given to protecting young performers and preventing disabilities, by working in partnership with teachers and students.

Registration Form

Performing Arts Medicine II: Focus on Young Performers
March 20-21, 1993

Med Chi member physicians $50; nonmember physicians $75; allied health professionals $35; performers, music educators, students, residents $15. Tuition assistance available.

Return registration form and payment to
Susan E. Harman
Music Medicine Clearinghouse
Med Chi, 1211 Cathedral St.
Baltimore, MD 21201-5585

Optional attendance at the Baltimore Symphony Orchestra concert on Sunday, March 21 at 3 p.m. is an additional $15. The program will consist of works by Grieg, Richard Strauss, and Tchaikovsky, conducted by Eri Klas. To purchase BSO tickets, you must register by February 26.

For additional information, contact Susan E. Harman at 410-539-0872 (within the Baltimore metro area) or at 1-800-492-1056 (elsewhere in MD). The fax number is 410-727-5967.

☐ Med Chi member ($50) ☐ Nonmember physician ($75)

☐ Allied health professional ($35)

☐ Performer, music educator, students, residents ($15)

☐ BSO concert ($15) Total $ _____

Form of payment

☐ check (payable to "Med Chi") ☐ Visa ☐ Mastercard

Credit Card# _____ Exp. Date _____

Signature _____

Please print

Name _____

Address _____

City _____

State _____ Zip _____

Phone (___) _____

Component Society _____

Maryland license # _____

Program

Saturday, March 20

8:00-8:30	*Registration and Coffee*	
8:30-9:00	Opening Remarks	Jose Yosuico, M.D. George Udvarhelyi, M.D.
9:00-9:45	The Impact of Drug Abuse on the Performing Arts	Harold Crossley, D.D.S., Ph.D.
9:45-10:30	Eating Disorders Among Performers: Prevention, Recognition and Treatment	Beth Williams, Ph.D.
10:30-10:45	*Coffee Break*	
10:45-11:30	The Americans with Disabilities Act: Impact and Implementation for Physicians	Randi Kopf, R.N., M.S., J.D.
11:30-12:15	Stress Management for Music Students	David Sternbach, A.C.S.W.
12:15-1:15	*Lunch*	
1:15-2:00	Harp Recital	Sonja Inglefield
2:00-2:45	Prescription Drugs and their Effect on Performance	Andrew C. Goldstone, M.D.
2:45-3:30	Health Concerns of Marching Musicians (includes demo)	Susan Harman, M.S.L.S., M.Ed.
3:30-3:45	*Coffee Break*	
3:45-4:30	Potential Effects of Diabetes Mellitus on Performing Artists	Richard Rubin, Ph.D.
4:30-5:15	Skin Diseases Among Musicians	Jeff Harvell, M.D.

Sunday, March 21

8:30-9:00	*Registration and Coffee*	
9:00-9:45	Focal Dystonia: Clinical Manifestations and Rational Approach to Treatment	Gregory Degnan, M.D. Emily Jeter, O.T.R.
9:45-10:30	Vocal Dysphonia – Focal Dystonia: A Myofascial Masquerade	Lawrence Funt, D.D.S.
10:30-10:45	*Coffee Break*	
10:45-11:30	The Alexander Technique: What it can Contribute to Performance Health (includes demo)	Barbara Lachman, M.A.
11:30-12:15	The Feldenkrais Method: What it can Contribute to Performance Health (includes demo)	Aliza Stewart
12:15-1:00	Conditioning and Physical Fitness for Performers	David Kreisberg, M.D.
1:00-1:15	Conference Summation and Questions	
3:00	Optional BSO concert	

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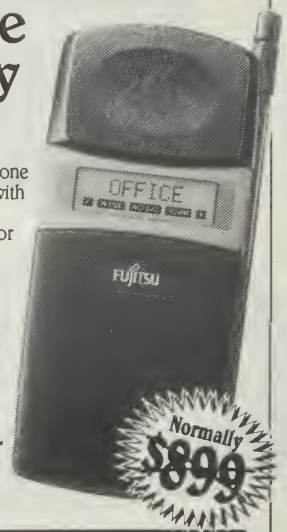
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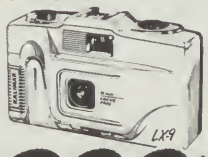
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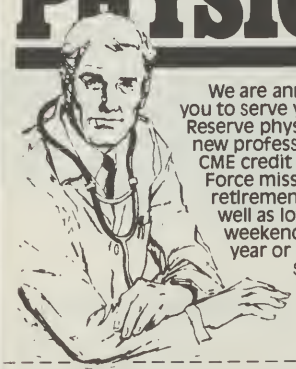
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AMA launches new ad campaign on health system reform

The American Medical Association has launched a series of 13 ads in the Washington, D.C. print media. Its purpose: to position the AMA and its Health Access America reform proposal as a comprehensive plan to contain costs, improve access and maintain quality. The ads portray the AMA as working toward serious reform to bring health insurance access to all Americans.

The campaign began with a full-page ad in the Jan. 20 inaugural edition of the *Washington Post.* That ad set the tone for the campaign by suggesting a "Time for a New Partnership" among physicians, the new administration and a new Congress. The ad series will present the AMA's reform agenda to its key Washington audience in a clear, direct, honest way -- inviting partnership and negotiation.

Each ad offers a copy of the AMA's Health Access America proposal. Eleven issue-focused ads also offer readers a fact sheet on the issue addressed in that ad. The final ad will summarize the AMA's agenda and call again for partnership.

The ads are running approximately once a week until mid-April, except when Congress is not in session. Beginning with the second ad, placement is opposite the federal page in the *Washington Post.* The entire series is also appearing in the *Washington Post's* national weekly edition, read by opinion leaders nationally. In addition, the first ad ran in the new Congress issues of *Roll Call* and *Congressional Quarterly*, and in *Roll Call's* special edition on health care policy.

Bush signs changes in CLIA regulations

In his final week in office, President Bush gave his approval to a new waived category for physician-performed tests under the Clinical Laboratory Improvement Amendments. The AMA and a coalition of medical specialty societies had urged the President to authorize the new regulations, which also had been backed by outgoing HHS Secretary Louis Sullivan, MD.

The AMA already has stated its intent to work with the Clinton Administration to develop additional improvements to CLIA, but also stated that the changes represented a significant first step toward improving the measure.

Prepared by the Department of Communications Services. For information, call 800 AMA-3211, ext. 4416.

AMA offers coverage to students, residents

Medical students and residents can now participate in a comprehensive insurance program through the AMA Insurance Agency Inc. The new MedPlus Advantage program offers three policies: life insurance up to $50,000; portable disability income of up to $2,500 per month, which students can carry from medical school to residency; and $2 million comprehensive major medical coverage for students and their dependents. Optional maternity coverage is also available.

To be sure the program met students' needs, MedPlus got input from AMA student members on what they wanted in a benefit plan. MedPlus recognizes the special insurance risks of students and residents; it even offers a rider covering up to $100,000 of educational debt if a student becomes totally and permanently disabled.

Acceptance in MedPlus is guaranteed to all enrolled students, regardless of their health status, and is available on a group basis through participating schools. AMA Insurance Agency Inc. is a wholly owned subsidiary of AMA, providing insurance for physicians and medical students and their families.

Now available: AMA Guidelines for Adolescent Preventive Services

Adolescence is a time of great change. It is the time we expect our children to grow -- physically and emotionally -- into adults. With this tremendous growth often comes a rapid increase in behaviors that put an adolescent's health at risk. Unsafe sexual behavior or experimentation with drugs are just two ways teens may expose themselves to health risks.

In the past, health issues facing adolescents have been dealt with piecemeal. However, ensuring a healthy transition into adulthood requires that these issues be viewed as a whole, with traditional physical and psychosocial development and contemporary health problems addressed together.

To help primary care providers do this, the AMA has just developed *Guidelines for Adolescent Preventive Services* (GAPS) -- a set of recommendations for delivering a *package* of adolescent clinical preventive services.

You can request a copy of the GAPS guidelines by calling the AMA Department of Adolescent Health at 800 AMA-3211, ext. 5570.

Prepared by the Department of Communications Services. For information, call 800 AMA-3211, ext. 4416.

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Full-time internist-BC/BE. Salary and benefits will vary with experience. Send CV to: Suite B-216, 4000 Mitchellville Rd., Bowie, MD 20716.

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- Spouses of deceased members shall be entitled to two complimentary insertions for the disposal of the deceased physician's practice or equipment.
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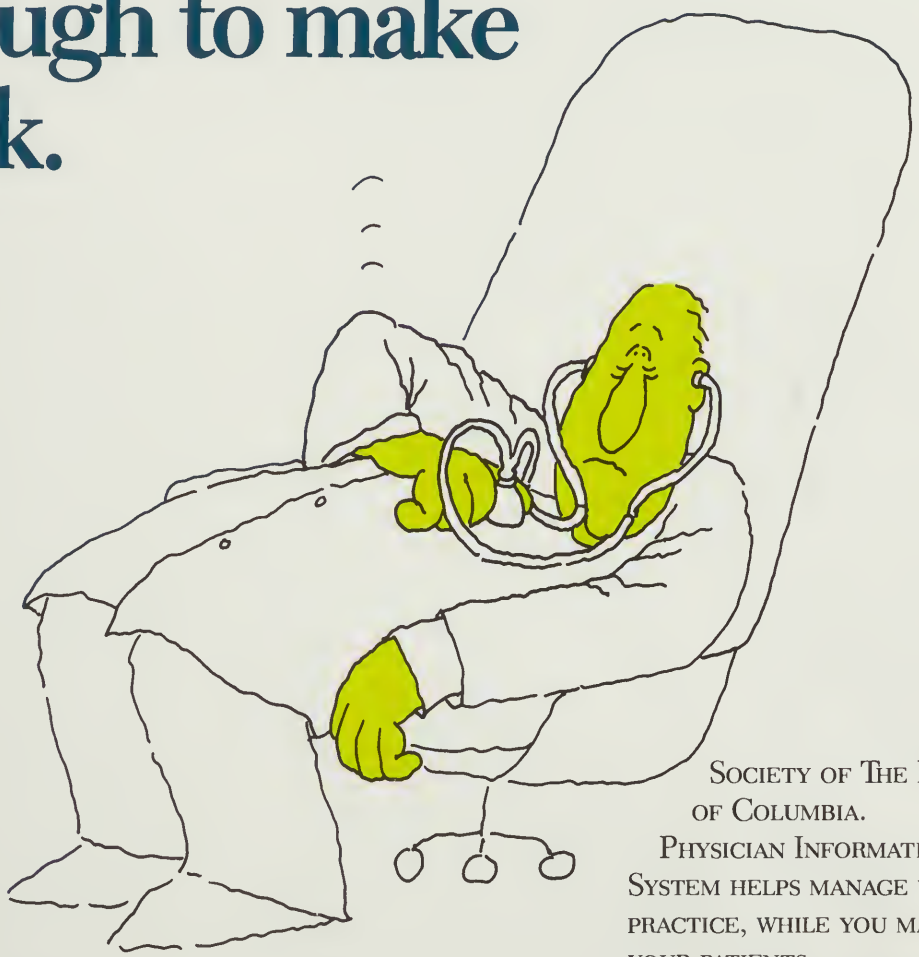
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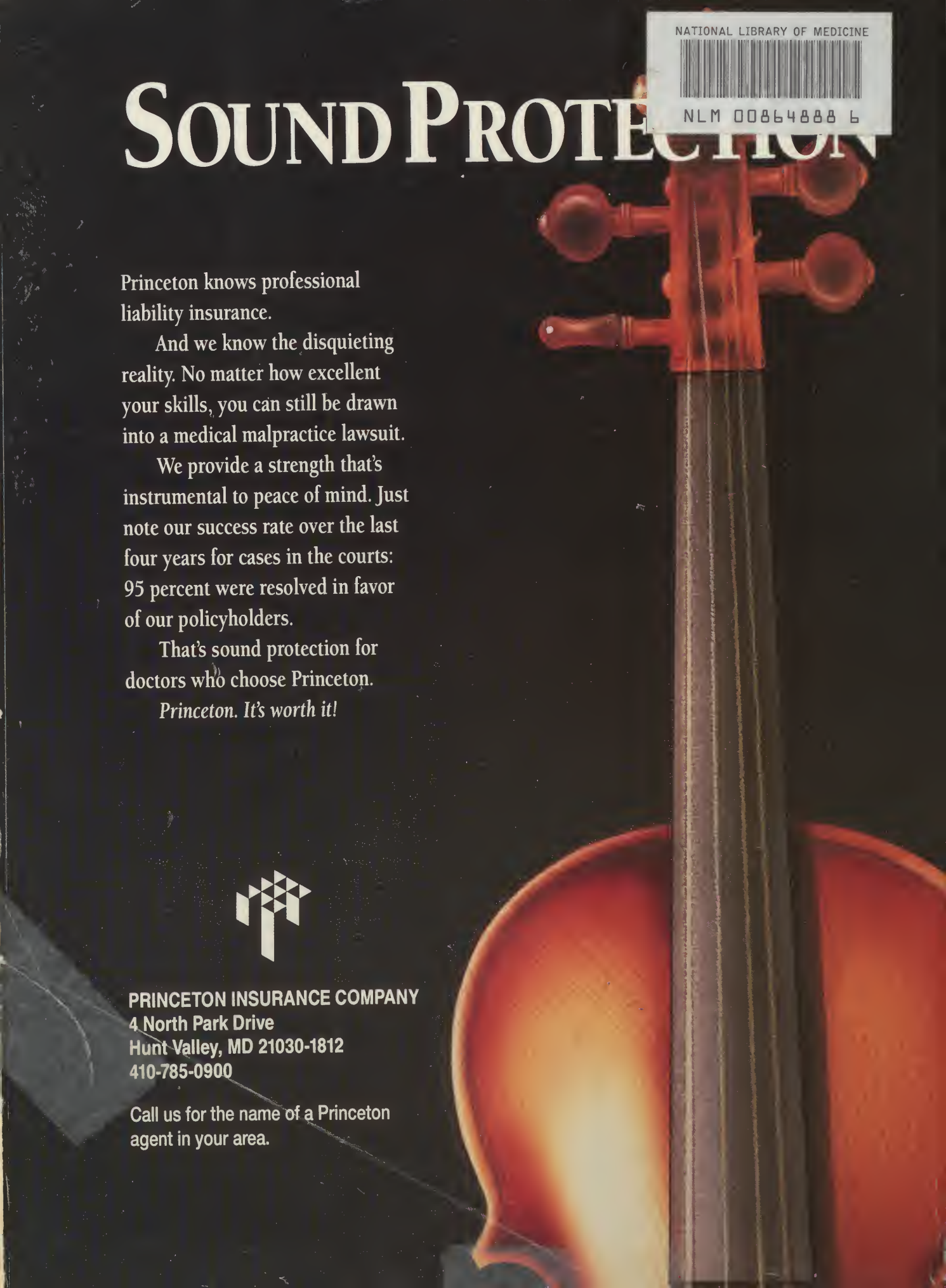
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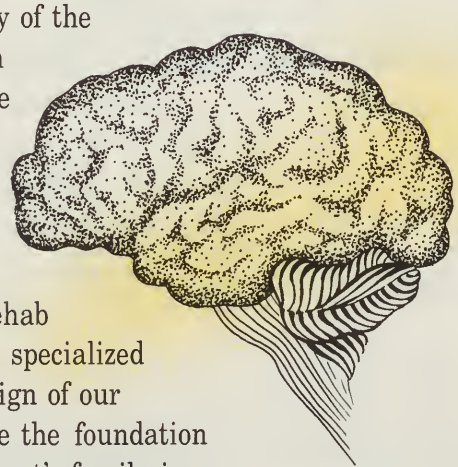
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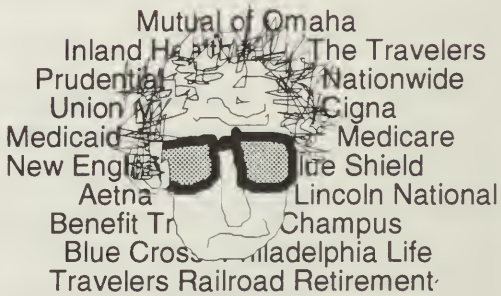
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The violin on the cover is one of two owned by Louis Krause, M.D. Donated to Med Chi by Dr. Krause's sister, Louise, it is on display in the Krause Room on the second floor of Med Chi. The interior decorating, furnishings, and maintenance of this room were made possible by the generosity of Dr. Krause.

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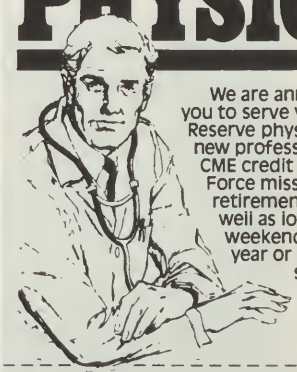
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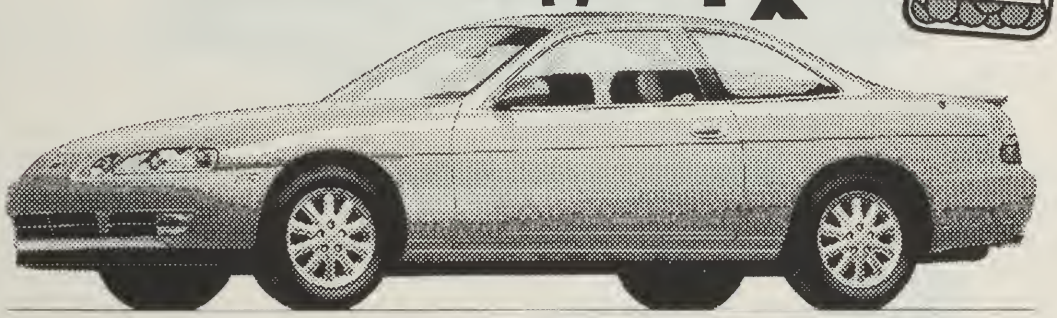
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195th Annual Meeting of the Medical and Chirurgical Faculty of Maryland

at the

University of Maryland
University College Conference Center
College Park, Maryland

Prevention 1993 – Maryland
Preliminary Program

Thursday-Saturday, April 29-May 1, 1993

Support Our Exhibitors
Exhibits are an important part of Med Chi's annual meeting and are a valuable adjunct to the scientific program.

By visiting the exhibits before and after your scientific programs, you will help ensure that Med Chi receives valuable income that allows us to offer you annual and semiannual meetings.

Med Chi urges you to express your appreciation to exhibitors by visiting their booths and discussing your mutual involvement in patient care.

Continuing Medical Education Credits
The Medical and Chirurgical Faculty of Maryland is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor continuing medical education for physicians.

The Medical and Chirurgical Faculty of Maryland designates this continuing medical education activity for up to 16 credit hours in Category 1 of the Physician's Recognition Award of the American Medical Association. Physicians attending this year's meeting can earn up to a maximum of 16 CME credits.

Hotel Reservations
The University of Maryland University College Conference Center in College Park offers comfortable accommodations complete with color cable television, telephone, private bath and desk. Guests at the conference center can also enjoy a wide variety of recreational facilities including an 18-hole golf course, tennis and racquetball courts, weight rooms, swimming pools and jogging paths.

Med Chi has reserved a limited number of rooms at a special group rate of $65.00 for a single occupancy room and $80.00 for a double occupancy room.*

To make a reservation, call 1-800-727-8622 and give the Med Chi group number: G2568.

*Tax and incidentals not included.

Telephone Messages
During the meeting, messages may be relayed to participants by calling 301-985-7300.

Miscellaneous
Contact Joan Mannion at 1-800-492-1056 or 410-539-0872 with questions about continuing medical education sessions.

For general questions regarding the annual meeting, call Betsy Newman at 1-800-492-1056 or 410-539-0872.

Directions
The University of Maryland University College Conference Center is located at the corner of University Boulevard and Adelphi Road in College Park, Maryland.

From Baltimore and points north:
Take I-95 South to the Capital Beltway (I-495) toward College Park. Take exit for U.S. 1 South (Exit 25B). Proceed approximately 1 mile south on U.S. 1 and turn right onto MD Route 193 West. At 3rd traffic light, turn left onto Adelphi Road. On Adelphi, make first, immediate left onto Campus Drive. The conference center will be visible on your left. Parking for guests is available in the 4th driveway on the left.

From Bowie/Annapolis areas and points east:
Take MD Route 50 to Capital Beltway (I-95). Go north on I-95 to College Park. Take exit U.S. 1 South (Exit 25B). Proceed approximately 1 mile south on U.S. 1 and turn right onto MD Route 193 West. At 3rd traffic light, turn left onto Adelphi Road. On Adelphi, make first, immediate left onto Campus Drive. The conference center will be visible on your left. Parking for guests is available in the 4th driveway on the left.

From Washington, DC:
Take George Washington Parkway to I-495 (toward Rockville). Follow I-495 and take exit for New Hampshire Avenue/Takoma Park (Rt. 650). Go south on New Hampshire Avenue and turn left at the second light (Adelphi Road). Stay on Adelphi Road forapproximately 3 miles (you will go through 3 traffic lights). At the 4th light, turn left onto Campus Drive. The conference center will be visible on your left. Parking for guests is available in the 4th driveway on the left.

From Montgomery County and points west:
Take the Capital Beltway (I-495) to New Hampshire Avenue/ Takoma Park (Rt. 650). Go south on New Hampshire Avenue and turn left at the second light (Adelphi Road). Stay on Adelphi Road for approximately 3 miles (you will go through 3 traffic lights). At the 4th light, turn left onto Campus Drive. The conference center will be visible on your left. Parking for guests is available in the 4th driveway on the left.

THURSDAY, APRIL 29, 1993

8:30 am – 5:00 pm
Ft. McHenry Room, Founders Room and Main Concourse
Registration/Exhibits open

9:00 am – 4:00 pm
Chancellors Room and Regents Room
Auxiliary – 44th Annual Meeting

9:00 am – 10:30 am
Room 1109
Early Intervention in Rheumatoid Arthritis — Does it Make a Difference?
Maryland Society for Rheumatic Diseases

Moderator:
Marcia C. Schmidt, M.D., President,
Maryland Society for Rheumatic Diseases

Speakers:
Howard Hauptman, M.D., Vice President,
Maryland Society for Rheumatic Diseases
Chief, Department of Rheumatology,
Greater Baltimore Medical Center
Ira Fine, M.D., Chief,
Department of Rheumatology, Sinai Hospital
Anneli H. Navarro, P.T., M.Ed.
Mauro, Navarro and Hart, Physical Therapy
Marcia C. Schmidt, M.D.

Objectives:
Participating physicians will
- understand the criteria for diagnosis of rheumatic disease,
- be able to identify suitable patients for early treatment and
- be aware of effective early treatments to minimize or prevent deformities.

Target Audience:
Family physicians, primary care physicians and general internists

CME Credit: 1.5

9:00 am - 10:30 am
Room 1123
Case Management of the Seropositive HIV Patient
Committee on Aids

Speakers:
Lois Eldred, P.A., M.P.H.
Director of Support and Education Services
The Moore Clinic
Eric Fine, M.D., Assistant Director, AIDS Help Services,
Maryland Department of Health and Mental Hygiene

Objectives:
Participating physicians will
- be better able to manage their HIV-positive patients and
- be aware of patient care resources and educational services available throughout Maryland.

Target Audience:
Primary care physicians, infectious disease specialists, public health physicians and other physicians with HIV–positive patients

CME Credit: 1.5

9:00 am - 10:30 am
Room 1105
Substance Abuse Education for Primary Care Physicians: An Overview of Treating the Substance Abusing Patient
Med Chi Department of Education

Moderator:
Carmine M. Valente, Ph.D., Deputy Executive Director, Med Chi

Speaker:
N. Joseph Gagliardi, M.A., M.D., Associate Medical Director of Addictions Services, Green Spring Mental Health Services, Adjunct Assistant Professor of Psychiatry, University of Maryland School of Medicine

Objectives:
Participating physicians will
- understand the positive and effective role primary care physicians have in treating substance abusing patients,
- be able to describe techniques for eliciting a substance abuse history from a patient through the medical interview,
- recognize and understand how to use several uncomplicated substance abuse screening questionnaires and laboratory tests for the assessment of alcohol and drug problems and
- be able to describe techniques and strategies for counseling patients with substance abuse problems.

Target audience:
Primary care physicians, obstetricians, gynecologists, emergency physicians, internists, pediatricians and psychiatrists

CME Credit: 1.5

10:30 am - 11:00 am
Ft. McHenry Room, Founders Room and Main Concourse
Break - Visit the Exhibits

11:00 am - 12:00 noon
Room 1105
Cues and Clues in Performing Arts Medicine
Committee on Medicine and the Performing Arts

Moderator:
John B. DeHoff, M.D., Chairperson,
Committee on Medicine and the Performing Arts

Speakers:
Bernard Filner, M.D., Private practitioner
Lawrence A. Funt, D.D.S., M.S.D., Director
The Cranio-Facial Pain Center of Washington
Leo M. Rozmaryn, M.D., Orthopaedic Hand Surgeon;
Attending, Shady Grove Adventist Hospital

Objectives:
Participating physicians will
- have an increased awareness of performance limitations of performing artists in all categories,
- be able to give improved initial care to performing artists and
- be able to help performing artists protect themselves from injury while performing or practicing.

Target Audience:
Primary care physicians, surgeons, orthopaedists, neurologists and physical medicine specialists

CME Credit: 1

11:00 am - 12:00 noon
Chesapeake Room
Blue Cross and Blue Shield of Maryland Update: An Address by BCBSM Executives
Med Chi Insurance Fund

Moderator:
Allan D. Jensen, M.D., Chairperson,
Med Chi Insurance Fund

Speakers:
Frank Gunther, Chairperson of the Board of Directors,
Blue Cross and Blue Shield of Maryland
Arthur T. Keefe, Jr., M.D., Vice President and Corporate
Medical Director, Blue Cross and Blue Shield of Maryland

Objectives:
Participating physicians will
- gain an understanding of the current status of BCBSM and
- be able to voice their concerns and ask questions regarding BCBSM issues.

Target Audience:
All physicians

CME Credit: None

12:00 noon - 1:00 pm
Lunch on your own

12:00 noon - 1:00 pm
VFF Room
Senior Health Insurance: What to Look For and What to Avoid in Medicare Supplement and Long-Term Care Coverages
Med Chi Agency
(Physicians are encouraged to pre-register for this luncheon meeting which is limited to fifty persons. See registration form for details.)

Speakers:
Lynda Sussman, Executive Vice President, C.O.B. Inc.
Paul Spigelmire, Representative, C.N.A. Insurance Companies

Objective:
Participating physicians and spouses will
- have an increased understanding of post-retirement health care coverage options.

Target Audience:
Physicians and spouses who are considering their retirement health insurance options

CME Credit: None

1:00 pm - 5:30 pm
Chesapeake Room
Clearing the Air about Poisonous Gas
Committee on Scientific Activity and the Maryland Chapter, American College of Emergency Physicians

Moderator:
Henry Farkas, M.D., M.P.H.. F.A.C.E.P., Member,
Board of Directors, Maryland Chapter
American College of Emergency Physicians

Speaker:
Henry J. Seigelson, M.D., F.A.C.E.P., Clinical Assistant Professor, Emory University Department of Emergency Medicine, Chairperson, National American College of Emergency Physicians Section of Disaster Medicine

Elimination of Chemical Weapons Stock Pile: Emergency Medicine Concerns

Panel:
John Grant, M.D., Health Officer, Caroline, Kent and Queen Anne counties
Francis M. Henderson, M.D., Private Provider
Occupational Medical Services, Pine Bluff Stockpile
Sanford S. Leffingwell, M.D. Medical Director, Medical Epidemiology, Centers for Disease Control
John B. McCabe, M.D., President-elect
American College of Emergency Physicians
Roger G. McIntosh, M.D., Medical Director
U.S. Army Chemical Materiel Destruction Agency
Aberdeen Proving Grounds, Maryland
Henry J. Seigelson, M.D., F.A.C.E.P.
Marilyn Tishbin, M.D., Public Affairs Officer
U.S. Army Chemical Materiel Destruction Agency
Aberdeen Proving Grounds, Maryland

Objectives:
Participating physicians will become familiar with
- the characteristics of chemical agents, with heavy emphasis on mustard agent,
- the process and procedures for the elimination of stockpiles,
- the effects of exposure to chemical agents, with heavy emphasis on mustard agent,
- decontamination protocols, protective clothing and how to avoid contamination of medical facilities and
- protocols for the medical treatment of patients who have been exposed to chemical agents, with heavy emphasis on mustard agent.

Target Audience:
Emergency physicians, family physicians, internists, pediatricians, hospital and education staffs, disaster planning groups, nurses, emergency nurses, pre-hospital care providers, legislators, and DHMH employees

CME Credit: 4

1:00 pm - 3:00 pm
Room 1105
Jesse C. Coggins Memorial Lecture

Medical Management in Home Care
Committee on Long-Term Care and Geriatrics

Moderator:
George Taler, M.D., Chairperson, Long-Term Care and Geriatrics Committee, Assistant Professor, Department of Family Medicine

Speakers:
Joseph Zebley, M.D., Past President, Maryland Academy of Family Practice
George Taler, M.D.
Francis Lodder, L.C.S.W., Social Worker, Division of Geriatric Medicine, Francis Scott Key Medical Center
Carol Sylvester, M.S., C.R.N.P., Director, The Johns Hopkins Home Care

Objectives:
Participating physicians will be able to
- identify the needs of homebound elderly,
- identify community resources for the elderly and
- practice appropriate medical management of the elderly at home.

Target Audience:
Family physicians, internists and other primary care physicians

CME Credit: 2

1:00 pm - 3:00 pm
Room 1123
Mammography Potpourri: Screening, Problem Solving and Clarification of Controversial Topics Surrounding Silicone Implants, Including Rheumatological Aspects
Maternal Welfare Subcommittee of the Committee on Public Health and the Maryland Medical Breast Society

Introducers:
Harrold T. Elberfeld, M.D., Chairperson, Maternal Welfare Subcommittee of the Committee on Public Health
Bernard M. McGibbon, M.D., President, Maryland Medical Breast Society

Speakers:
Mammography Screening and Problem Solving
Judy M. Destouet, M.D., Associate, Copeland, Hyman and Shackman Radiology Associates

Rheumatological Controversies Surrounding Silicone Implants
Ira Fine, M.D., Chief, Rheumatology, Sinai Hospital

Radiological Controversies Surrounding Silicone Implants
H. Alexander Munitz, M.D.

Objectives:
Participating physicians will
- be able to describe the benefits of evaluative screening,
- be able to identify the types of screening,
- be able to tell who should screen and how to screen,
- be able to describe what screening can and cannot achieve,
- be more aware of the effect of silicone implants on detection of cancer by mammography and
- be more aware of issues concerning questions about the possibility of a connection between silicone implants and connective tissue disorders or autoimmune diseases.

Target Audience:
General practitioners, internists, obstetricians, gynecologists, family physicians, plastic surgeons, general surgeons and radiologists

CME Credit: 2

3:00 pm - 3:30 pm
Ft. McHenry Room, Founders Room and Main Concourse
Break - Visit the Exhibits

3:30 - 4:30 pm
Room 1105
Preventing and Responding to Domestic Violence: What Every Physician Should Know
Public Relations Committee, Committee on Public Health, and Auxiliary

Moderators:
Hiroshi Nakazawa, M.D., Co-Chairperson, Public Relations Committee
Marty Wasserman, M.D., Chairperson Committee on Public Health

Speakers:
C. Sue Hecht, President, Maryland Network Against Domestic Violence
Susan C. Mize, M.A., Executive Director, Maryland Network Against Domestic Violence

Objectives:
Participating physicians will
- be able to recognize the symptoms of family violence,
- be able to discuss family violence with their patients and
- be aware of appropriate resources for help for patients.

Target Audience:
Primary care physicians, emergency physicians, obstetricians, gynecologists, psychiatrists and internists

CME Credit: 1

▼ 3:30 pm - 5:30 pm
Room 1109
Preventive Health Care for the Elderly Patient
Committee on Long-Term Care and Geriatrics and the Prince George's County Medical Society

Moderator:
Jay Siwek, M.D., Professor, Community and Family Medicine; Chief, Division of Family Practice, Georgetown University School of Medicine

Speakers:
Health Promotion and Disease Prevention in the Older Patient
Mel P. Daly, M.D., Assistant Professor, Director, Division of Geriatric Medicine, Department of Family Medicine, University of Maryland
Overview of Geriatric Assessment
Charles Cefalu, M.D., Assistant Professor, Director of Geriatrics, Georgetown University School of Medicine, Family Practice Residency Program
Computerized Geriatric Assessment
Paul A. DeVore, M.D., Associate Director, Family Practice Residency Program, Prince George's Hospital Center
Practical Approaches to Incorporating Preventive Medicine into Ambulatory Care
Charles Rosenfarb, M.D., Assistant Professor, Division of Geriatric Medicine, Department of Family Medicine, University of Maryland
Preventive Medicine in the Nursing Home
James Richardson, M.D., Assistant Professor, Medical Director, University Family Practice, University of Maryland

Objectives:
Participating physicians will
- be able to identify those topic areas appropriate for preventive medicine in the older patient,
- review the principal tools of geriatric assessment,
- be aware of the development and use of a software program specifically designed for primary care physician offices,
- be aware of means of incorporating preventive medicine practices into ongoing care and
- know guidelines for developing an ethically appropriate preventive medicine prescription for nursing home patients.

Target Audience:
Family physicians, general internists, psychiatrists, geriatrician and allied health care professionals

CME Credit: 2

▼ 3:30 pm - 6:00 pm
Room 1123
Computers in the Medical Office — Using Computers Prophylactically
Committee on Computers in Medicine

Speaker:
Rafael C. Haciski, M.D., Chairperson, Committee on Computers in Medicine

Objective:
Participating physicians will
- gain an understanding of the various uses of computer hardware and software available for physician office use

Target Audience:
All physicians

CME Credit: None

▼ 4:45 pm - 5:45 pm
Room 1105
Coronary Artery Disease and Estrogen Use in Women
Committee on Women in Medicine

Introducer:
Randy S. Ellis, M.D., Chairperson
Committee on Women in Medicine

Speaker:
Trudy L. Bush, Ph.D., M.H.S., Associate Professor, Department of Epidemiology, The Johns Hopkins University School of Hygiene and Public Health

Objectives:
Participating physicians will
- recognize the correlation between coronary artery disease and estrogen use in women and
- learn about preventing heart disease in women.

Target Audience:
Family physicians, obstetricians, gynecologists and cardiologists

CME Credit: 1

FRIDAY, APRIL 30, 1993

7:30 am - 5:00 pm
Ft. McHenry Room and Founders Room
Registration

8:00 am - 5:00 pm
Ft. McHenry Room, Founders Room and Main Concourse
Exhibits open

7:30 am - 8:00 am
Session Registration

8:00 am - 10:00 am
VFF Room
Medicine on Trial: An Interactive Risk Management Program for Physicians
Medical Mutual Liability Insurance Society of Maryland
(Medical Mutual will give a 5% premium discount on 1994 individual liability renewal policies to their members who attend this program. To receive the premium discount, there is a $40 program fee.)

Moderators:
Daniel E. Kohn, M.D., Emergency Physician
Patricia Fulk, Claims Representative

Objectives:
Participating physicians will
- be able to identify pertinent patient care issues,
- increase their knowledge of diagnostic and therapeutic modalities,
- understand a medical malpractice claim and
- become more aware of risk management skills.

Target Audience:
All physicians

CME Credit: 2

8:30 am - 5:00 pm
Room 1123
Auxiliary - 44th Annual Meeting

10:00 am - 12:00 noon
Chesapeake Room
Council Meeting

11:30 am - 12:30 pm
Room 1105
Robinson Memorial Lectureship in Dermatology:
Pulsed Dye Laser Therapy of Cutaneous Vascular Lesions
Maryland Dermatologic Society

Introducer:
John Skouge, M.D., President, Maryland Dermatologic Society

Speaker:
Barbara A. Gilcrest, M.D., Professor and Chairperson, Dermatology Department, Boston University School of Medicine

Objective:
Participating physicians will
- become familiar with pulsed dye laser therapy of cutaneous vascular lesions.

Target Audience:
Dermatologists, family physicians, plastic surgeons and pediatricians

CME Credit: 1

12:00 noon - 1:00 pm
Lunch on your own

12:00 noon - 1:00 pm
Garden Restaurant
Prayer Luncheon

Unnecessary Treatment in Hopeless Illness: Overutilization?
Committee on Medicine and Religion
(An additional fee of $15 is required to attend this luncheon. See registration form for details.)

Introducer:
Leslie R. Miles, Jr., M.D., Chairperson Committee on Medicine and Religion

Speaker:
Jack M. Zimmerman, M.D., Chief of Surgery Church Hospital

Objectives:
Participating physicians will
- be more aware of issues surrounding the aggressive medical treatment of hopelessly ill patients.

Target Audience:
All physicians

CME Credit: 1

12:00 noon - 4:00 pm
VFF Room
Auxiliary Luncheon and Auction

1:00 pm - 2:00 pm
Chesapeake Room
Health Care Reform

Speaker:
Raymond Scalettar, M.D., Chairperson, Board of Trustees, American Medical Association

Objective:
Participating physicians will
- be aware of the issues and problems regarding health care reform at the federal level.

Target Audience:
All physicians

CME Credit: None

2:00 pm - 4:00 pm
Chesapeake Room
House of Delegates Meeting

3:30 - 5:30 pm
VFF Room
Demystifying the Essentials: CME Policies and Procedures
Continuing Medical Education Review Committee

Introducer:
William L. Thomas, M.D., Chairperson, Continuing Medical Education Review Committee; Medical Director, Franklin Square Hospital Center

Speakers:
William L. Thomas, M.D.
Carmine M. Valente, Ph.D., Deputy Executive Director Med Chi
Charles Osborne, Ed.D., Director, Continuing Medical Education, Children's National Medical Center

Objectives:
Participating physicians will
- be familiar with the functions of the Med Chi Continuing Medical Education Review Committee (CMERC),
- understand the difference between the CMERC and a committee accredited to sponsor CME activities,
- review recent Accreditation Council for Continuing Medical Education (ACCME) accreditation requirements and
- understand how to work productively with commercial groups, staying within the *Standards for Commercial Support of Continuing Medical Education*.

Target Audience:
All physicians involved in planning CME activities and organizational supporting staff

CME Credit: 2

3:30 pm - 4:30 pm
Room 1105
Update on Injury Prevention in the Workplace
Maryland Society of Physical Medicine and Rehabilitation and the Maryland Society of Orthopaedic Rehabilitation and Occupational Medicine

Moderator:
Michael Shear, M.D., President, Maryland Society of Physical Medicine and Rehabilitation

Speaker:
Gordon S. Smith, M.D., M.P.H., Associate Professor, School of Hygiene and Public Health, The Johns Hopkins University

Objectives:
Participating physicians will
- become more aware of common risk factors present in the workplace and
- be prepared to address these risk factors constructively.

Target Audience:
Physiatrists, occupational medicine specialists, trauma physicians and orthopaedic surgeons

CME Credit: 1

SATURDAY, MAY 1, 1993

8:00 am - 12:00 noon
Ft. McHenry, Founders Room and Main Concourse
Registration/Exhibits open

8:30 am - 10:00 am
Room 1105
Treatment of Depression as Secondary Prevention
Committee on Mental Health and Maryland Psychiatric Society

Moderator:
Arthur Hildreth, M.D.; Chief of Psychiatry, Union Memorial Hospital; President, Maryland Psychiatric Society

Speakers:
Jerrold F. Rosenbaum, M.D. Associate Professor of Psychiatry, Massachusetts General Hospital, Harvard Medical School
Arthur Hildreth, M.D.
Paul McClelland, M.D., Chairperson, Department of Psychiatry, Greater Baltimore Medical Center

Objectives:
Participating physicians will
- become aware of the general diagnostic framework and preventive aspects of treatments,
- be familiar with the newer antidepressants, particularly serotonergic agents and
- review other approaches to the treatment of depression and anxiety.

Target Audience:
All physicians

CME Credit: 1.5

8:30 am - 10:00 am
Room 1109
Prevention of Headaches/Anxiolytics and Narcotics — Prescription vs. Abuse
Committee on Drugs

Moderator:
Ramesh K. Khurana, M.D., Chairperson, Committee on Drugs

Speakers:
New Advances in the Prevention of Headaches
Ramesh K. Khurana, M.D.
Anxiolytics and Narcotics — Prescription vs. Abuse
Stanley R. Platman, M.D., Chairperson, Physician Rehabilitation Committee

Objectives:
Participating physicians will
- be aware of the risk factors of headaches,
- know what medicines are effective in headache prevention and
- understand how to avoid analgesic and narcotic overuse.

Target audience:
Family physicians and internists

CME Credit: 1.5

8:30 am - 10:00 am
Room 1123
Prevention of Disease in Pediatrics and Primary and Secondary Cancer Prevention
Maryland Academy of Family Physicians and the Department of Family Medicine, University of Maryland

Moderator:
J. Roy Guyther, M.D., Clinical Associate Professor, Department of Family Medicine, University of Maryland

Speakers:
Primary and Secondary Cancer Prevention — How It Hasn't Been Done
Gayle Hopper, M.D., Clinical Associate Professor, Department of Family Medicine, University of Maryland
Prevention in Pediatrics
Gregory Taylor, M.D., Assistant Professor, Department of Family Medicine, University of Maryland

Objectives:
Participating physicians will
- be aware of current information about primary and secondary cancer prevention in the office setting and
- be able to discuss prevention strategies for children

Target Audience:
Family physicians and general internists

CME Credit: 1.5

10:00 am - 12:00 noon
Room 1109
Latex Anaphylaxis and an Overview of Intraoperative Anaphylaxis
Maryland Asthma and Allergy Society

Moderator:
John Bacon, M.D., President, Maryland Asthma and Allergy Society

Speakers:
Latex Anaphylaxis
Jay Slater, M.D., The Children's National Medical Center
Overview of Intraoperative Anaphylaxis
Richard Moscicki, M.D., Allergy Associates, Massachusetts Hospital

Objectives:
Participating physicians will
- be aware of the increased incidence of anaphylaxis, appropriate evaluation and treatment and
- be aware of differential diagnosis and treatment of intraoperative anaphylaxis.

Target Audience:
Pediatricians, internists, family physicians, surgeons, otolaryngologists, anesthesiologists and allergists

CME Credit: 2

10:00 am - 12:00 noon
Chesapeake Room
Prevention of Heart Disease and Stroke — The Basics and the Controversies
American Heart Association-Maryland Affiliate, Inc.

Moderator:
James P.G. Flynn, M.D., M.P.H., Chairperson, Medical Education Task Force; Director, Corporate Rehabilitation Services, University of Maryland Medical System

Speakers:
Back to the Basics — The Big Four CVD Risk Factors
Michael Miller, M.D., Assistant Professor of Medicine, Director of Preventive Cardiology, University of Maryland School of Medicine
Prevention of Stroke: The Role of Aspirin
Michael Sloan, M.D., Assistant Professor of Neurology, Radiology, Epidemiology and Preventive Medicine, University of Maryland Hospital
Treatment of Hypercholesterolemia in Women: The Role of Estrogens
Trudy L. Bush, Ph.D., M.H.S., Associate Professor of Epidemiology, The Johns Hopkins University School of Hygiene and Public Health
The Role of Alcohol in Management of the CVD Patient
Simeon Margolis, M.D., Ph.D., Professor of Medicine, The Johns Hopkins University

Objectives:
Participating physicians will
- know the risk factors for CVD and stroke,
- be aware of the role of aspirin in prevention,
- be aware of the cardiopreventive effects of estrogen replacement therapy and
- be able to discuss the pros and cons of prescribing alcohol to patients.

Target Audience:
Internists and family physicians

CME Credit: 2



Special Guest
Raymond A. Scalettar, M.D.
Chair, Board of Trustees
American Medical Association

Raymond Scalettar, M.D., a practicing internist and rheumatologist from Washington, DC, and a founding partner of the Washington Internal Medicine Group, was re-elected in June 1991 to the American Medical Association (AMA) Board of Trustees and was elected secretary/treasurer of the AMA. In June of 1992 he was elected chair of the AMA Board of Trustees. He had served as chair of the AMA commissioners to the Joint Commission on the Accreditation of Healthcare Organizations from January 1991 to June 1992.

Until his election to the board in 1985, Dr. Scalettar was chair of the AMA Committee on Professional Liability and served on the AMA Council on Medical Service since 1981. He was an alternate delegate from the Medical Society of the District of Columbia to the AMA House of Delegates from 1969 to 1975 and became a delegate in 1978.

Dr. Scalettar is past president and past chair of the board of the Medical Society of the District of Columbia, and is vice chair of National Capitol Underwriters, Inc., the manager for the Society's professional liability insurance company. His longstanding interest in professional liability prompted him to become a founder and chair of the Society's Legal Resources Fund and chair of the National Capitol Brokerage, Ltd., a subdivision of the Society's professional liability insurance company.

Dr. Scalettar and his wife, Nada, reside in North Bethesda, Maryland. They are the parents of a daughter, Lydia, and a son, Mark.

10:00 am - 10:30 am
Ft. McHenry Room, Founders Room and Main Concourse
Break — Visit the Exhibits

10:30 am - 12:00 noon
Room 1105
Recent Breakthroughs in Understanding and Reducing Physician Stress
Physician Rehabilitation Committee

Introducer:
Stanley R. Platman, M.D., Chairperson, Physician Rehabilitation Committee

Speaker:
Morton C. Orman, M.D., General Internist

Objectives:
Participating physicians will
- recognize three very common — but inaccurate — beliefs about stress,
- understand why physical exercise, meditation and other relaxation techniques are not the best strategies for relieving physician stress and
- learn about a new and effective coping method for dealing with anger, frustration, worry, guilt and other "hassles" of professional life.

Target audience:
All physicians

CME Credit: 1.5

10:30 am - 11:30 am
Room 1123
Breast Cancer Prevention
Committee on Scientific Activity; the Department of Surgery, University of Maryland School of Medicine

Introducer:
J. Richard Lilly, M.D., Chairperson, Committee on Scientific Activity

Speaker:
E. George Elias, M.D., Professor of Surgery and Oncology, University of Maryland School of Medicine

Objectives:
Participating physicians will
- be able to identify women who are at increased risk of developing breast cancer,
- be able to state the difference between prevention and early detection of breast cancer and
- be able to refer interested women to a site where the Breast Cancer Prevention Trial is being conducted in Maryland.

Target Audience:
All physicians interested in breast disease, especially family physicians, obstetricians, gynecologists, general internists, general surgeons, surgical oncologists and medical oncologists

CME Credit: 1

12:00 noon - 1:00 pm
Lunch on your own

12:00 noon - 1:30 pm
VFF Room
Practice Management Strategies for Young Physicians
Physician's Practice Digest
(Pre-registration is required for this luncheon meeting which has the corporate sponsorship of CBSI, Med Chi Agency, and the Medical Mutual Liablity Insurance Society of Maryland. See registration form for details.)

Introducer:
Mehrdad Massumi, M.D., Chairperson, Med Chi Committee on Young Physicians

Speakers:
Michael Hodes, Esq., Partner, Hodes, Pessin, and Katz
Charlotte Kohler, Principal, Kohler Health Care Consultants

Objectives:
Participating physicians will
- be aware of the legal and economic issues to consider when starting or joining a practice,
- understand negotiating strategies, right of affliation, cost of entry, employment agreements, buy/sell agreements, business contracts, and loan consolidation and
- review operational issues of starting a practice, such as leasing space, office equipment, hiring personnel, benefits and compensation for staff, marketing, referrals, automation, and cash flow management.

Target Audience:
Physicians under the age of 35 or any physician interested in improving practice management.

CME Credit: None

1:30 p.m. - 4:00 p.m.
Chesapeake Room
House of Delegates Meeting
(Council meeting immediately follows the House of Delegates meeting.)

6:00 pm - 1:00 am
Chesapeake Room, Ft. McHenry Room and Founders Room
Presidential Banquet Honoring Jose M. Yosuico, M.D. and Joseph Snyder, M.D.
(An additional fee is required to attend this function. See registration form for details)

Registration Form
Please print clearly:

Name_____

Address_____

_____

City_____State_____ Zip_____

Telephone_____County Society_____

Check all boxes that apply

____Med Chi Members - No Charge

____Pre-registered nonmembers $35.00/presentation hour*
i.e., $35.00 x _____ hours = $_____
(Note: There is no charge for "Clearing the Air About Poisonous Gas")

*There will be an on-site registration fee of $15.00 for nonmembers who do not pre-register.

Event Pre-registration**

___ **Senior Health Insurance: What to Look for and What to Avoid in Medicare Supplement and Long-Term Care Coverages** No Charge
A special luncheon meeting sponsored by the Med Chi Agency
Thursday, April 29, 1993
12:00 noon - 1:00 pm
CME Credit: None

___ **Clearing the Air About Poisonous Gas** No Charge
Thursday, April 29, 1993
1:00 pm - 5:30 pm
Med Chi Committee on Scientific Activity and the Maryland Chapter, American College of Emergency Physicians
CME Credit: 4

___ **Prayer Luncheon — "Unnecessary Treatment in Hopeless Illness: Overutilization?"** $ 15.00
Friday, April 30, 1993
12:00 noon - 1:00 pm
Med Chi Committee on Medicine and Religion
CME Credit: 1

___ **"Practice Management Strategies for Young Physicians"** No Charge
A special luncheon meeting sponsored by Physician's Practice Digest
Saturday, May 1, 1993
12:00 noon - 1:30 pm
CME Credit: None

___ **Presidential Banquet Honoring Jose M. Yosuico, M.D. and Joseph Snyder, M.D.** $60.00
Saturday, May 1, 1993
6:00 pm - 1:00 am

Total $_____

Form of payment (check one)
__check payable to Med Chi __Visa __Mastercard

Card#_____

Expiration Date_____

Signature_____

Return this form to
Med Chi Communications Department
1211 Cathedral Street
Baltimore, MD 21201-5585

You may fax your registration to 410-547-0915 or phone your registration by calling Lori Robinson or Vivian Smith at 1-800-492-1056 or 410-539-0872.

**Please note this is a preliminary program. More meetings, events, and continuing medical education activities may be added to the final program, which will be distributed at the meeting.

Executive Director's Newsletter

March 1993

Annual Meeting Preliminary Program

Preceding this newsletter is a revised preliminary program for the 1993 Med Chi Annual Meeting: "Prevention 93 — Maryland." The preliminary program features detailed information about the meeting including speakers and course objectives for continuing medical education (CME) sessions. To register for this meeting, complete the registration form following the preliminary program.

Board of Physician Quality Assurance Nominations

Pursuant to §14-202 of the Health Occupations Article of the *Annotated Code of Maryland*, the Medical and Chirurgical Faculty of Maryland is announcing that an election, for the purpose of selecting names to be submitted to the governor for possible nomination to the Board of Physician Quality Assurance, will be held at the following place and time:

Saturday, May 1, 1993, at 2 pm
University of Maryland
University College Conference Center
College Park, Maryland

All licensed physicians in Maryland are eligible to vote. Physicians are requested to bring proof of licensure.

The following physicians, nominated through a process open to all licensed physicians in Maryland, will be on the ballot:

Frederick P. Alpern, M.D.
Ira N. Brecher, M.D. (incumbent)
Irvin H. Cohen, M.D.
Sanford H. Eisenberg, M.D.
Lawrence C. Jones, M.D. (incumbent)
Charles Kaelber, M.D.
Suryabala B. Kanhouwa, M.D.
Santosh D. Kaushal, M.D.
Kenneth R. Lippman, M.D.
Lois H. Love, M.D.
Melvin Museles, M.D.
Joseph J. Reidy, M.D.
Michael K. Spodak, M.D.
Ronald J. Taylor, M.D.

If you plan on attending the election, directions to the University of Maryland Conference Center appear in the annual meeting preliminary program preceding this newsletter. If you do attend, please remember to bring your medical license.

Anti-Tobacco Warning Labels for Magazines

Physicians are encouraged to use the new Med Chi peel-and-stick warning labels for magazines containing tobacco advertising. The labels read, "Warning: This magazine contains cigarette advertisements. Your physician does not support the use of any tobacco products or the advertisement of such products." Sample labels appear in this journal. Free additional labels are available by calling the Med Chi switchboard operator at 410-539-0872 or 1-800-492-1056.

Nominations for 1993-1994 Med Chi Officers

The following is the listing of the slate of officers selected by the Med Chi nominating committee for the year 1993-1994. Additional nominations for officers will be accepted during the House of Delegates meeting on Friday, April 30, 1993, at 2:00 pm. The election for 1993-1994 offices will be held on Saturday, May 1, 1993, during the House of Delegates meeting which begins at 1:30 pm. Both meetings will be held at the University of Maryland, University College Conference Center, in College Park, Maryland. (For directions to this meeting, see the preliminary program preceding this newsletter.)

(Those elected will assume office at the conclusion of the 1993 annual meeting, unless otherwise indicated.)

For Presentation at the House of Delegates Friday, April 30, 1993

President-elect
Joseph S. Fastow, M.D., Calvert County
(President-elect 1993-1994) (President 1994-1995)

First Vice President
Alex Azar, M.D., Wicomico County

Second Vice President
J. Ramsay Farah, M.D., Washington County

Third Vice President
Thomas E. Allen, M.D., Baltimore County

Secretary
Paul A. Stagg, M.D., Dorchester County

Treasurer
Carol W. Garvey, M.D., Montgomery County

Finney Fund Committee
Robert G. Greenfield, M.D., Montgomery County

Delegates to the AMA *(January 1, 1994-December 31, 1996)*
Donald T. Lewers, M.D., Talbot County
George S. Malouf, M.D., Prince George's County

Alternate Delegates to the AMA *(January 1, 1994-December 31, 1996)*
Carol W. Garvey, M.D., Montgomery County
Reynaldo L. Lee-Llacer, M.D., Prince George's County

Alternate Delegate to the AMA to Fill Unexpired Term
(to December 31, 1994)
Jose M. Yosuico, M.D., Baltimore City

Nominating Committee 1992-1993
J. David Nagel, M.D., Baltimore County, Chairperson
Leslie R. Miles Jr., M.D., Western Maryland
Paul A. Stagg, M.D., Eastern Shore
Hilary T. O'Herlihy, M.D., Southern Maryland
Cheryl E. Winchell, M.D., Montgomery County
John Richard Lilly, M.D., Prince George's County
Donald H. Dembo, M.D., Baltimore City
Mayer C. Liebman, M.D., Baltimore County
Hiroshi Nakazawa, M.D., Member-at-Large

March 22, 1993

Medicare EMC Team

Medicare is committed to increasing the number of claims submitted electronically. A dedicated team of employees has been established to assist you in

- understanding the advantages of Electronic Media Claims (EMC)
- understanding how EMC works
- selecting a vendor
- testing
- converting to electronic billing

For more information on EMC submissions, see the ad on page 328 of this *MMJ* or, for a free listing of approved vendors to help you with electronic claims technology solutions, call 410-561-4277.

Submitting Electronic Media Claims vs Paper Claims

As an Electronic Media Claims (EMC) biller, are you still submitting certain claim types on paper? Paper claims are often submitted because providers do not realize that services can be billed electronically or do not know how to provide additional documentation electronically.

Practically all Medicare services can be submitted electronically. You can avoid unnecessary delays in payment by submitting all services electronically. And, if you are interested in receiving electronic fund transfers, you must submit at least 90 percent of your claims electronically.

If you are unsure about how to submit a particular service electronically, contact the EMC team at 410-561-4277.

Workers' Compensation Commission, Medical Claims: Processing Backlogs/Bills and Invoices

Maryland Workers' Compensation Commission is now processing medical claims at the rate of approximately 200 per week with a similar number being sent for review on a contractual basis. The commission believes that the backlog should be completly eliminated within three months. As a reminder, the commission notes that medical claims (WCC form C-51) should not be submitted by a health care provider to the commission until after a bill/invoice for the treatment has been sent to the employer/insurer and has been rejected or ignored. It is the provider's responsibility to properly invoice the employer or the insurer. The failure of the health care provider to first submit a bill to the employer/insurer will only delay the processing of the claim.

Lyme Disease Study

The Maryland State Health Department and the University of Maryland School of Medicine have received federal funds to study patient outcomes after antibiotic therapy for Lyme disease. This study should provide useful data to assist the practicing physician in managing Lyme disease. Therefore, we urge you to report all suspected cases of Lyme disease to your local health department immediately.

1993 Semiannual Meeting

Mark your calandars! The 1993 Med Chi Semiannual Meeting will be held Friday-Sunday, September 10-12, 1993 at the Sheraton Ocean City Resort and Conference Center, Ocean City, Maryland.

Med Chi has obtained a special group rate of $110/night for a single/double occupancy room* for this meeting. To reserve your room, call the Sheraton at 1-800-638-2100.

*Tax and incidentals not included.

Health Care Scholarships Available

The Prince George's County Medical Society, in conjunction with its Auxiliary, offers scholarships annually to high school seniors. The criteria for the scholarships are academic accomplishments, financial need, demonstrated ability, and, most importantly, a desire to pursue a career in the health care field. There are 25 scholarships in the amount of $200 and three scholarships in the amount of $500. For more information about this program, contact Anna McDonagh at the Prince George's County Medical Society at 301-341-7758.

Legislative Rally in Annapolis

On Thursday, March 18, 1993, nearly 100 physicians attended the Med Chi legislative rally in Lawyer's Square in Annapolis. The purpose of the rally was to allow Maryland physicians to express their views regarding health care reform and other legislative issues. During the rally, Med Chi Council Chairperson Joseph Fastow, M.D. introduced several physicians from around the state who expressed their concerns about health care reform, including Michael Epstein, M.D., Charles Franklin, M.D., Elizabeth Kingsley, M.D., Patricia O'Hora, M.D., and Gary Sprouse, M.D.

"We're here to propose serious reform," said Michael Epstein, M.D., a gastroenterologist from Annapolis. "We are men and women who have dedicated our life to saving lives.... Health care is our number one concern."

"I have a patient I will call Jane," said Elizabeth Kingsley, M.D., an Annapolis cardiologist. "She came to my office with severe chest pain and was at definite risk for a heart attack. Because of a pre-existing medical illness clause in her insurance policy, she has to wait three weeks to be hospitalized for this fatal condition. If Jane dies, the system will have contained costs, but Jane will have lost her life. Quality health care must be made available to all in Maryland." Dr. Kingsley added, "Physicians and their patients must be included in the formulation of legislation for health care reform so that quality medical care can be made available to all, and so that cost containment does not occur at the expense of quality, and at the expense of lives."

In addition to physicians, several members of the media attended the rally, including reporters from WMAR-TV (Channel 2), WBFF-TV (Channel 45), Maryland Public Television, *Baltimore Sun, Washington Post, Baltimore Business Journal, The Capitol, Capitol News Service,* and *Prince George's and Montgomery County Journal.* Stories about the rally were also featured by a number of radio stations and local newspapers.

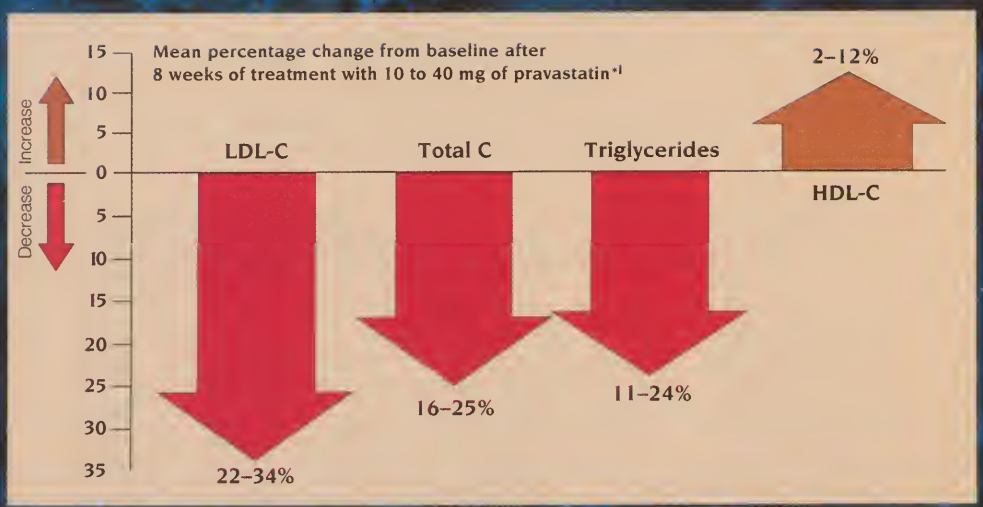
During the rally, several legislators spoke to Med Chi physicians, including Senators Paula C. Hollinger, Arthur Dorman, and Patricia R. Sher, and Senate Finance Committee Chairperson Thomas P. O'Reilly. Senator O'Reilly also answered questions posed by members of the crowd.

More information on the rally and the 1993 legislative session will be featured in an upcoming issue of the *MMJ.*

Angelo T. Troisi, F.A.C.H.E.
Executive Director

Effective cholesterol control

Consistently and significantly reduces total C and atherogenic LDL-C; positively affects other key lipids



*Each arrow represents a range of means derived from a single placebo-controlled study that included 55 patients treated with pravastatin.

PRAVACHOL® (pravastatin sodium) is indicated as an adjunct to diet for the reduction of elevated total and LDL-cholesterol levels in patients with primary hypercholesterolemia (Types IIa and IIb) when the response to diet alone has not been adequate.

Active liver disease *or* unexplained transaminase elevations, pregnancy and lactation are contraindications to the use of pravastatin.

Reference: 1. Jones PH, et al. Once-daily pravastatin in patients with primary hypercholesterolemia: a dose-response study. *Clin Cardiol.* 1991;14:146-151.

PRAVACHOL™

pravastatin sodium 20 mg tablets

Please see CONTRAINDICATIONS, WARNINGS, PRECAUTIONS, and ADVERSE REACTIONS in the brief summary of prescribing information on the adjacent page.

Bristol-Myers Squibb Company

PRAVACHOL® (Pravastatin Sodium Tablets)

CONTRAINDICATIONS

Hypersensitivity to any component of this medication.

Active liver disease or unexplained, persistent elevations in liver function tests (see WARNINGS).

Pregnancy and lactation. Atherosclerosis is a chronic process and discontinuation of lipid-lowering drugs during pregnancy should have little impact on the outcome of long-term therapy of primary hypercholesterolemia. Cholesterol and other products of cholesterol biosynthesis are essential components for fetal development (including synthesis of steroids and cell membranes). Since HMG-CoA reductase inhibitors decrease cholesterol synthesis and possibly the synthesis of other biologically active substances derived from cholesterol, they may cause fetal harm when administered to pregnant women. Therefore, HMG-CoA reductase inhibitors are contraindicated during pregnancy and in nursing mothers. **Pravastatin should be administered to women of childbearing age only when such patients are highly unlikely to conceive and have been informed of the potential hazards.** If the patient becomes pregnant while taking this class of drug, therapy should be discontinued and the patient apprised of the potential hazard to the fetus.

WARNINGS

Liver Enzymes: HMG-CoA reductase inhibitors, like some other lipid-lowering therapies, have been associated with biochemical abnormalities of liver function. Increases of serum transaminase (ALT, AST) values to more than 3 times the upper limit of normal occurring on 2 or more (not necessarily sequential) occasions have been reported in 1.3% of patients treated with pravastatin in the U.S. over an average period of 18 months. These abnormalities were not associated with cholestasis and did not appear to be related to treatment duration. In those patients in whom these abnormalities were believed to be related to pravastatin and who were discontinued from therapy, the transaminase levels usually fell slowly to pretreatment levels. These biochemical findings are usually asymptomatic although worldwide experience indicates that anorexia, weakness, and/or abdominal pain may also be present in rare patients.

As with other lipid-lowering agents, liver function tests should be performed during therapy with pravastatin. Serum aminotransferases, including ALT (SGPT), should be monitored before treatment begins, every six weeks for the first three months, every eight weeks during the remainder of the first year, and periodically thereafter (e.g., at about six-month intervals). Special attention should be given to patients who develop increased transaminase levels. Liver function tests should be repeated to confirm an elevation and subsequently monitored at more frequent intervals. If increases in AST and ALT equal or exceed three times the upper limit of normal and persist, then therapy should be discontinued. Persistence of significant aminotransferase elevations following discontinuation of therapy may warrant consideration of liver biopsy.

Active liver disease or unexplained transaminase elevations are contraindications to the use of pravastatin (see CONTRAINDICATIONS). Caution should be exercised when pravastatin is administered to patients with a history of liver disease or heavy alcohol ingestion (see CLINICAL PHARMACOLOGY: Pharmacokinetics/Metabolism). Such patients should be closely monitored, started at the lower end of the recommended dosing range, and titrated to the desired therapeutic effect.

Skeletal Muscle: Rhabdomyolysis with renal dysfunction secondary to myoglobinuria has been reported with pravastatin and other drugs in this class. Uncomplicated myalgia has also been reported in pravastatin-treated patients (see ADVERSE REACTIONS). Myopathy, defined as muscle aching or muscle weakness in conjunction with increases in creatine phosphokinase (CPK) values to greater than 10 times the upper limit of normal was reported to be possibly due to pravastatin in only one patient in clinical trials (<0.1%). Myopathy should be considered in any patient with diffuse myalgias, muscle tenderness or weakness, and/or marked elevation of CPK. Patients should be advised to report promptly unexplained muscle pain, tenderness or weakness, particularly if accompanied by malaise or fever. **Pravastatin therapy should be discontinued if markedly elevated CPK levels occur or myopathy is diagnosed or suspected. Pravastatin therapy should also be temporarily withheld in any patient experiencing an acute or serious condition predisposing to the development of renal failure secondary to rhabdomyolysis, e.g., sepsis; hypotension; major surgery; trauma; severe metabolic, endocrine, or electrolyte disorders; or uncontrolled epilepsy.**

The risk of myopathy during treatment with lovastatin is increased if therapy with either cyclosporine, gemfibrozil, erythromycin, or niacin is administered concurrently. There is no experience with the use of pravastatin together with cyclosporine. Myopathy has not been observed in clinical trials involving small numbers of patients who were treated with pravastatin together with niacin. One trial of limited size involving combined therapy with pravastatin and gemfibrozil showed a trend toward more frequent CPK elevations and patient withdrawals due to musculoskeletal symptoms in the group receiving combined treatment as compared with the groups receiving placebo, gemfibrozil, or pravastatin monotherapy. Myopathy was not reported in this trial (see PRECAUTIONS: Drug Interactions). One patient developed myopathy when clofibrate was added to a previously well tolerated regimen of pravastatin; the myopathy resolved when clofibrate therapy was stopped and pravastatin treatment continued. **The use of fibrates alone may occasionally be associated with myopathy. The combined use of pravastatin and fibrates should generally be avoided.**

PRECAUTIONS

General: Pravastatin may elevate creatine phosphokinase and transaminase levels (see ADVERSE REACTIONS). This should be considered in the differential diagnosis of chest pain in a patient on therapy with pravastatin.

Homozygous Familial Hypercholesterolemia. Pravastatin has not been evaluated in patients with rare homozygous familial hypercholesterolemia. In this group of patients, it has been reported that HMG-CoA reductase inhibitors are less effective because the patients lack functional LDL receptors.

Renal Insufficiency. A single 20 mg oral dose of pravastatin was administered to 24 patients with varying degrees of renal impairment (as determined by creatinine clearance). No effect was observed on the pharmacokinetics of pravastatin or its 3α-hydroxy isomeric metabolite (SQ 31,906). A small increase was seen in mean AUC values and half-life (t1/2) for the inactive enzymatic ring hydroxylation metabolite (SQ 31,945). Given this small sample size, the dosage administered, and the degree of individual variability, patients with renal impairment who are receiving pravastatin should be closely monitored.

Information for Patients: Patients should be advised to report promptly unexplained muscle pain, tenderness or weakness, particularly if accompanied by malaise or fever.

Drug Interactions: *Immunosuppressive Drugs, Gemfibrozil, Niacin (Nicotinic Acid), Erythromycin:* See WARNINGS: Skeletal Muscle.

Antipyrine: Clearance by the cytochrome P450 system was unaltered by concomitant administration of pravastatin. Since pravastatin does not appear to induce hepatic drug-metabolizing enzymes, it is not expected that any significant interaction of pravastatin with other drugs (e.g., phenytoin, quinidine) metabolized by the cytochrome P450 system will occur.

Cholestyramine/Colestipol: Concomitant administration resulted in an approximately 40 to 50% decrease in the mean AUC of pravastatin. However, when pravastatin was administered 1 hour before or 4 hours after cholestyramine or 1 hour before colestipol and a standard meal, there was no clinically significant decrease in bioavailability or therapeutic effect. (See DOSAGE AND ADMINISTRATION: Concomitant Therapy.)

Warfarin: In a study involving 10 healthy male subjects given pravastatin and warfarin concomitantly for 6 days, bioavailability parameters at steady state for pravastatin (parent compound) were not altered. Pravastatin did not alter the plasma protein-binding of warfarin. Concomitant dosing did increase the AUC and Cmax of warfarin but did not produce any changes in its anticoagulant action (i.e., no increase was seen in mean prothrombin time after 6 days of concomitant therapy). However, bleeding and extreme prolongation of prothrombin time has been reported with another drug in this class. Patients receiving warfarin-type anticoagulants should have their prothrombin times closely monitored when pravastatin is initiated or the dosage of pravastatin is changed.

Cimetidine: The $AUC_{0\text{-}12hr}$ for pravastatin when given with cimetidine was not significantly different from the AUC for pravastatin when given alone. A significant difference was observed between the AUC's for pravastatin when given with cimetidine compared to when administered with antacid.

Digoxin: In a crossover trial involving 18 healthy male subjects given pravastatin and digoxin concurrently for 9 days, the bioavailability parameters of digoxin were not affected. The AUC of pravastatin tended to increase, but the overall bioavailability of pravastatin plus its metabolites SQ 31,906 and SQ 31,945 was not altered.

Gemfibrozil: In a crossover study in 20 healthy male volunteers given concomitant single doses of pravastatin and gemfibrozil, there was a significant decrease in urinary excretion and protein binding of pravastatin. In addition, there was a significant increase in AUC, Cmax, and Tmax for the pravastatin metabolite SQ 31,906. Combination therapy with pravastatin and gemfibrozil is generally not recommended.

In interaction studies with *aspirin, antacids* (1 hour prior to PRAVACHOL), *cimetidine, nicotinic acid,* or *probucol,* no statistically significant differences in bioavailability were seen when PRAVACHOL (pravastatin sodium) was administered.

Other Drugs: During clinical trials, no noticeable drug interactions were reported when PRAVACHOL was added to: diuretics, antihypertensives, digitalis, converting-enzyme inhibitors, calcium channel blockers, beta-blockers, or nitroglycerin.

Endocrine Function: HMG-CoA reductase inhibitors interfere with cholesterol synthesis and lower circulating cholesterol levels and, as such, might theoretically blunt adrenal or gonadal steroid hormone production. Results of clinical trials with pravastatin in males and post-menopausal females were inconsistent with regard to possible effects of the drug on basal steroid hormone levels. In a study of 21 males, the mean testosterone response to human chorionic gonadotropin was significantly reduced ($p<0.004$) after 16 weeks of treatment with 40 mg of pravastatin. However, the percentage of patients showing a ≥50% rise in plasma testosterone after human chorionic gonadotropin stimulation did not change significantly after therapy in these patients. The effects of HMG-CoA reductase inhibitors on spermatogenesis and fertility have not been studied in adequate numbers of patients. The effects, if any, of pravastatin on the pituitary-gonadal axis in pre-menopausal females are unknown. Patients treated with pravastatin who display clinical evidence of endocrine dysfunction should be evaluated appropriately. Caution should also be exercised if an HMG-CoA reductase inhibitor or other agent used to lower cholesterol levels is administered to patients also receiving other drugs (e.g., ketoconazole, spironolactone, cimetidine) that may diminish the levels or activity of steroid hormones.

CNS Toxicity: CNS vascular lesions, characterized by perivascular hemorrhage and edema and mononuclear cell infiltration of perivascular spaces, were seen in dogs treated with pravastatin at a dose of 25 mg/kg/day, a dose that produced a plasma drug level about 50 times higher than the mean drug level in humans taking 40 mg/day. Similar CNS vascular lesions have been observed with several other drugs in this class.

A chemically similar drug in this class produced optic nerve degeneration (Wallerian degeneration of retinogeniculate fibers) in clinically normal dogs in a dose-dependent fashion starting at 60 mg/kg/day, a dose that produced mean plasma drug levels about 30 times higher than the mean drug level in humans taking the highest recommended dose (as measured by total enzyme inhibitory activity). This same drug also produced vestibulocochlear Wallerian-like degeneration and retinal ganglion cell chromatolysis in dogs treated for 14 weeks at 180 mg/kg/day, a dose which resulted in a mean plasma drug level similar to that seen with the 60 mg/kg dose.

Carcinogenesis, Mutagenesis, Impairment of Fertility: In a 2-year study in rats fed pravastatin at doses of 10, 30, or 100 mg/kg body weight, there was an increased incidence of hepatocellular carcinomas in males at the highest dose ($p<0.01$). Although rats were given up to 125 times the human dose (HD) on a mg/kg body weight basis, their serum drug levels were only 6 to 10 times higher than those measured in humans given 40 mg pravastatin as measured by AUC.

The oral administration of 10, 30, or 100 mg/kg (producing plasma drug levels approximately 0.5 to 5.0 times human drug levels at 40 mg) of pravastatin to mice for 22 months resulted in a statistically significant increase in the incidence of malignant lymphomas in treated females when all treatment groups were pooled and compared to controls ($p<0.05$). The incidence was not dose-related and male mice were not affected.

A chemically similar drug in this class was administered to mice for 72 weeks at 25, 100, and 400 mg/kg body weight, which resulted in mean serum drug levels approximately 3, 15, and 33 times higher than the mean human serum drug concentration (as total inhibitory activity) after a 40 mg oral dose. Liver carcinomas were significantly increased in high-dose females and mid- and high-dose males, with a maximum incidence of 90 percent in males. The incidence of adenomas of the liver was significantly increased in mid- and high-dose females. Drug treatment also significantly increased the incidence of lung adenomas in mid- and high-dose males and females. Adenomas of the eye Harderian gland (a gland of the eye of rodents) were significantly higher in high-dose mice than in controls.

No evidence of mutagenicity was observed *in vitro*, with or without rat-liver metabolic activation, in the following studies: microbial mutagen tests, using mutant strains of *Salmonella typhimurium* or *Escherichia coli;* a forward mutation assay in L5178Y TK +/− mouse lymphoma cells; a chromosomal aberration test in hamster cells; and a gene conversion assay using *Saccharomyces cerevisiae*. In addition, there was no evidence of mutagenicity in either a dominant lethal test in mice or a micronucleus test in mice.

In a study in rats, with daily doses up to 500 mg/kg, pravastatin did not produce any adverse effects on fertility or general reproductive performance. However, in a study with another HMG-CoA reductase inhibitor, there was decreased fertility in male rats treated for 34 weeks at 25 mg/kg body weight, although this effect was not observed in a subsequent fertility study when this same dose was administered for 11 weeks (the entire cycle of spermatogenesis, including epididymal maturation). In rats treated with this same reductase inhibitor at 180 mg/kg/day, seminiferous tubule degeneration (necrosis and loss of spermatogenic epithelium) was observed. Although not seen with pravastatin, two similar drugs in this class caused drug-related testicular atrophy, decreased spermatogenesis, spermatocytic degeneration, and giant cell formation in dogs. The clinical significance of these findings is unclear.

Pregnancy: Pregnancy Catagory X: See CONTRAINDICATIONS.

Safety in pregnant women has not been established. Pravastatin was not teratogenic in rats at doses up to 1000 mg/kg daily or in rabbits at doses of up to 50 mg/kg daily. These doses resulted in 20x (rabbit) or 240x (rat) the human exposure based on surface area ($mg/meter^2$). However, in studies with another HMG-CoA reductase inhibitor, skeletal malformations were observed in rats and mice. PRAVACHOL (pravastatin sodium) should be administered to women of child-bearing potential only when such patients are highly unlikely to conceive and have been informed of the potential hazards. If the woman becomes pregnant while taking PRAVACHOL (pravastatin sodium), it should be discontinued and the patient advised again as to the potential hazards to the fetus.

Nursing Mothers: A small amount of pravastatin is excreted in human breast milk. Because of the potential for serious adverse reactions in nursing infants, women taking PRAVACHOL should not nurse (see CONTRAINDICATIONS).

Pediatric Use: Safety and effectiveness in individuals less than 18 years old have not been established. Hence, treatment in patients less than 18 years old is not recommended at this time. (See also PRECAUTIONS: **General**.)

ADVERSE REACTIONS

Pravastatin is generally well tolerated; adverse reactions have usually been mild and transient. In 4-month long placebo-controlled trials, 1.7% of pravastatin-treated patients and 1.2% of placebo-treated patients were discontinued from treatment because of adverse experiences attributed to study drug therapy; this difference was not statistically significant. In long-term studies, the most common reasons for discontinuation were asymptomatic serum transaminase increases and mild, non-specific gastrointestinal complaints. During clinical trials the overall incidence of adverse events in the elderly was not different from the incidence observed in younger patients.

Adverse Clinical Events: All adverse clinical events (regardless of attribution) reported in more than 2% of pravastatin-treated patients in the placebo-controlled trials are identified in the table below; also shown are the percentages of patients in whom these medical events were believed to be related or possibly related to the drug:

	All Events %		Events Attributed to Study Drug %	
Body System/Event	Pravastatin (N = 900)	Placebo (N = 411)	Pravastatin (N = 900)	Placebo (N = 411)
Cardiovascular				
Cardiac Chest Pain	4.0	3.4	0.1	0.0
Dermatologic				
Rash	4.0*	1.1	1.3	0.9
Gastrointestinal				
Nausea/Vomiting	7.3	7.1	2.9	3.4
Diarrhea	6.2	5.6	2.0	1.9
Abdominal Pain	5.4	6.9	2.0	3.9
Constipation	4.0	7.1	2.4	5.1
Flatulence	3.3	3.6	2.7	3.4
Heartburn	2.9	1.9	2.0	0.7
General				
Fatigue	3.8	3.4	1.9	1.0
Chest Pain	3.7	1.9	0.3	0.2
Influenza	2.4*	0.7	0.0	0.0
Musculoskeletal				
Localized Pain	10.0	9.0	1.4	1.5
Myalgia	2.7	1.0	0.6	0.0
Nervous System				
Headache	6.2	3.9	1.7*	0.2
Dizziness	3.3	3.2	1.0	0.5
Renal/Genitourinary				
Urinary Abnormality	2.4	2.9	0.7	1.2
Respiratory				
Common Cold	7.0	6.3	0.0	0.0
Rhinitis	4.0	4.1	0.1	0.0
Cough	2.6	1.7	0.1	0.0

*Statistically significantly different from placebo.

The following effects have been reported with drugs in this class:

Skeletal: myopathy, rhabdomyolysis.

Neurological: dysfunction of certain cranial nerves (including alteration of taste, impairment of extra-ocular movement, facial paresis), tremor, vertigo, memory loss, paresthesia, peripheral neuropathy, peripheral nerve palsy.

Hypersensitivity Reactions: An apparent hypersensitivity syndrome has been reported rarely which has included one or more of the following features: anaphylaxis, angioedema, lupus erythematous-like syndrome, polymyalgia rheumatica, vasculitis, purpura, thrombocytopenia, leukopenia, hemolytic anemia, positive ANA, ESR increase, arthritis, arthralgia, urticaria, asthenia, photosensitivity, fever, chills, flushing, malaise, dyspnea, toxic epidermal necrolysis, erythema multiforme, including Stevens-Johnson syndrome.

Gastrointestinal: pancreatitis, hepatitis, including chronic active hepatitis, cholestatic jaundice, fatty change in liver, and, rarely, cirrhosis, fulminant hepatic necrosis, and hepatoma; anorexia, vomiting.

Reproductive: gynecomastia, loss of libido, erectile dysfunction.

Eye: progression of cataracts (lens opacities), ophthalmoplegia.

Laboratory Test Abnormalities: Increases in serum transaminase (ALT, AST) values and CPK have been observed (see WARNINGS).

Transient, asymptomatic eosinophilia has been reported. Eosinophil counts usually returned to normal despite continued therapy. Anemia, thrombocytopenia, and leukopenia have been reported with other HMG-CoA reductase inhibitors.

Concomitant Therapy: Pravastatin has been administered concurrently with cholestyramine, colestipol, nicotinic acid, probucol and gemfibrozil. Preliminary data suggest that the addition of either probucol or gemfibrozil to therapy with lovastatin or pravastatin is **not** associated with greater reduction in LDL-cholesterol than that achieved with lovastatin or pravastatin alone. No adverse reactions unique to the combination or in addition to those previously reported for each drug alone have been reported. Myopathy and rhabdomyolysis (with or without acute renal failure) have been reported when another HMG-CoA reductase inhibitor was used in combination with immunosuppressive drugs, gemfibrozil, erythromycin, or lipid-lowering doses of nicotinic acid. Concomitant therapy with HMG-CoA reductase inhibitors and these agents is generally not recommended. (See WARNINGS: **Skeletal Muscle** and PRECAUTIONS: **Drug Interactions.**)

OVERDOSAGE

There have been no reports of overdoses with pravastatin.

Should an accidental overdose occur, treat symptomatically and institute supportive measures as required.

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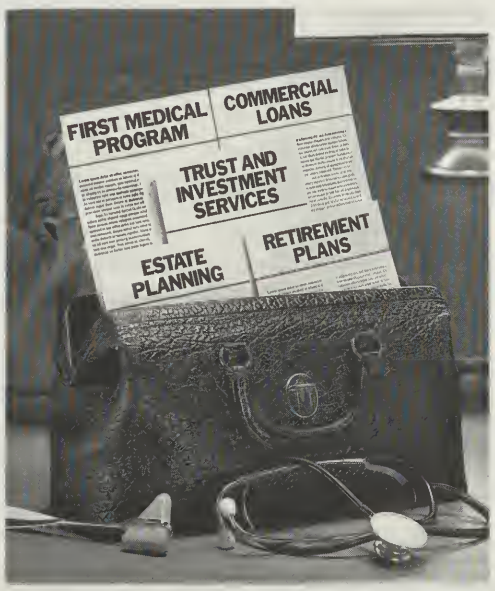
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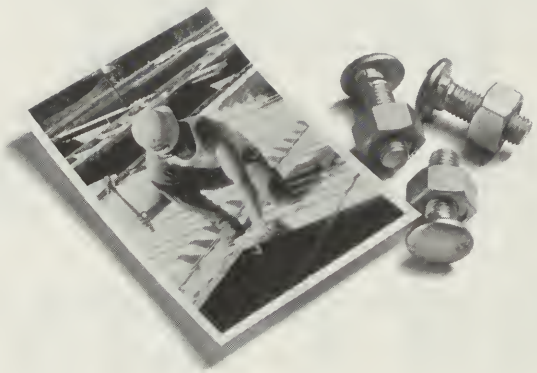
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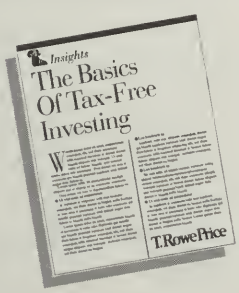
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LETTERS TO THE EDITOR

Does Med Chi need a lobbyist?

The response by Dr. Yosuico[1] to my letter of January 25, 1993, about the necessity and propriety of hiring a lobbyist to represent Med Chi is welcomed, but do we need a lobbyist to assist during a transition period? What transition period? Our committees are in place. Many of our members know the legislative process. Our ability to communicate directly to legislators and their committees exists now—just as it will next year.

Hasn't our recent national election emphasized the poor regard the public—our patients—holds for lobbyists? Why can't we act now, promptly and decisively? Money for the lobbyist's salary may have already been committed through a contractual arrangement made by our executive committee and, therefore, has been "lost." Just how much are we paying him? Regardless, we can begin to repair our public image immediately by releasing our lobbyist now.

FRED J. HELDRICH, M.D.
Baltimore, Maryland

1. Yosuico J. Response from the leadership. *Md Med J* 1993; 42(1):24.

Electric shock: A potentially hazardous approach to treating venomous snakebites

The use of electric shock for the treatment of venomous snakebites is not an innovative medical breakthrough. In fact, the use of electric shock for the treatment of venomous snakebites and stings dates back to the 1920s when a number of articles promoted its use in outdoor and sporting magazines. Recently, a highly regarded educational program on the Discovery Channel[tm] advocated carrying a handheld electrical shock device, commonly referred to as a stun gun, when travelling into snake endemic areas (**Figure 1**). The statement made during the program may lead one to deduce that electric shock could be used as a substitute for antivenin to treat a venomous snakebite.

In July of 1986, Guderian et al published a letter in *The Lancet* outlining the successful use of electric shock in the treatment of snakebite among the Waorani Indians of Ecuador.[1] In a study of the same population in 1978, Larrick et al pointed out that 45% of the total population had been bitten previously by venomous snakes, and 50% had been bitten more than once.[2] It is well established that in victims who have sustained one or more bites by the same species of snake, subsequent bites tend to be less severe.[3] Theakston et al also reported in 1981 that in an analysis of 223 samples of serum obtained from the Waorani Indians, over 78% were positive by ELISA (enzyme-linked immunoabsorbent assay) against snake venoms indigenous to that region.[4] As Russell suggested, an argument could be made that Guderian et al were treating a highly selective group of "immune" patients.[5] In addition, Guderian failed to take into account that approximately 25% of all crotalid (pit viper) bites are "dry" and do not result in envenomation.[3]

The mechanisms postulated by Guderian for electric shock are vexatious. He hypothesized that "there may

be a local effect on the host tissues or a direct effect on the activity of the venom." Furthermore, he stated that, "venom has a short half-life, and that electrospasm could shutdown local blood vessels, prevent its absorption, and allow the venom to be inactive."

The venoms of pit vipers stored in the laboratory by Klauber are still as potent today as they were over 60 years ago.[5] In fact, snake venoms are highly complex proteins that have the longest half-life of any known protein substance. Even if electrospasm induced shutdown of local blood vessels, it has been shown that over 90% of pit viper venoms are injected subcutaneously and are absorbed systemically via the lymphatics and not through the bloodstream.[3]

The continued promotional use of electric shock therapy as a successful alternative treatment for snake envenomation is yet another example of anecdotal experiences that have not been subjected to controlled and reproducible experimental studies. Russell already reported an incidence of myocardial infarction in an elderly man following the application of a lead from the coil of an outboard motor boat to treat his rattlesnake bite.[5] There have since been numerous other injuries resulting from the use of lawnmower coils and automobile battery jumper cables. As Bucknall has emphasized, "many people do not realize the difference between amperage and voltage, and may deduce that if 20,000 volts from a stun gun is beneficial, then 12 volts from a car battery is harmless."[6]

Electric shock therapy is a potentially hazardous treatment and merely serves to forestall the only currently accepted standard of treatment for snakebite envenomation—the prompt administration of specific antivenin.

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BARRY S. GOLD, M.D., F.A.C.P.
Pikesville, Maryland ■



Figure 1. One type of electric shock device (stun gun) used to treat venomous bites.

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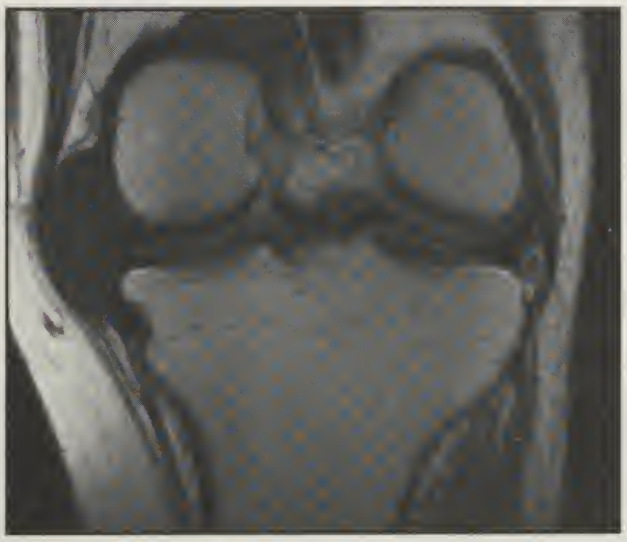
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Medicine and the performing arts

John B. DeHoff, M.D., M.P.H.

Dr. DeHoff is chairperson of the Med Chi Committee on Medicine and the Performing Arts.

Performing artists may present with ailments that are superficially familiar, but with subtle differences that may or may not interfere with customary therapies. Standard treatment of a simple respiratory illness, for example, can threaten the career of a vocalist if prescribed or over-the-counter remedies dry the respiratory tract and affect vocal ranges. If excessive rest is prescribed in the treatment of moderate musculoskeletal or radicular pains, an instrumentalist could lose a valuable orchestral position. Dancers, too, are known to suffer the pains of chronic injuries to their backs or lower extremities, rather than seek medical diagnosis and management.

Performing arts medicine and sports medicine have much in common. Harm results from excessive practice habits, and injuries occur during vigorous public performances. Selected portions of a major task may be repeated again and again for perfection. The instrumentalist may use techniques that are incorrect or unwise, or that cause finger or hand disabilities of variable duration. Idiosyncratic hand structure, incorrect positions used to hold wind instruments or instruments that are heavy or large, or even incorrect positions at keyboards may cause intractable pain. Dancers who leap, bend, or hold certain positions must practice strenuously to achieve requisite strength in the back and lower extremities. Beginners may not yet have the joint or ligamentous characteristics that a dance routine requires, and may be seriously disabled if they persist in an unwise practice.

Performers, especially students, must be able to understand and interpret difficult material written for virtuosos even though they may not attain perfection. Strong personal competitiveness is always present, although it is not confrontational as in contact or team sports. Performing artists are simply determined to be near-perfect in their chosen fields, and sometimes harm themselves by excessive practice.

A vocalist may lose a vital range because of chronic gastroesophageal reflux resulting from obesity. A flutist may experience disabling right arm pain. Orofacial pain or a Bell's palsy may cause a brass horn player to "lose his lip," the term used for an impaired embouchure or mouth structure. Violinists may notice impaired hearing in the left ear from their own instrument, or other orchestral sound levels may cause a general hearing loss. Physicians who specialize in performing arts medicine find that they must be especially sensitive to the unusual needs of performing artist patients and their careers. Unless the physician has had personal experience as a performer, the complaints of performing artists may seem

small—even trivial—but they may severely limit abilities to continue training, pursue a career, or achieve success. Expected years of productive, performing, artistic life are variable, from the relatively brief careers of dancers to the longer ones of instrumentalists or vocalists.

Performing arts medicine is a new and growing specialty, with its own professional associations and journals. The various ailments to which performing artists are subject require attention by neurologists, psychiatrists, physical therapists, or surgical specialists such as orthopaedists, otolaryngologists, and hand surgeons. Generalist physicians who know the players in the entourage of large orchestras often are included in road trips to provide general medical support and help select specialist care when needed.

This issue of *MMJ* is designed to introduce physicians to the basic elements of performing arts medicine. Early recognition and treatment of disabilities resulting from faulty practice habits can help eliminate pain that interferes with performance. The articles are based on presentations given at the conference, "Performing Arts Medicine: Issues in Diagnosis and Management," sponsored by the Med Chi Committee on Medicine and the Performing Arts on January 24-25, 1992. Topics include the history of performing arts medicine, informed consent as applied to artist patients, upper extremity disorders, treatment of overuse injuries, stress and the musician, life in the orchestra, instrument modifications, lower extremity problems of dancers, and myofascial pain.

A physician in any type of practice may expect at some time to encounter a performer with a limiting condition. This patient may be an artist who is a child or youth in training; a practicing professional; or a more senior person who plays, sings, or dances for personal enjoyment and achievement. The ancient dictum, *primum non nocere* (first do no harm), applies to the prescription of antihistamines or hormones that can adversely affect a singer's voice range, as well as to general, unfocused recommendations for rest that may harm the fine instrumentalist. Physicians will find the articles in this issue of *MMJ* to be of help when treating performing artists. ■

Selected Music Medicine Clearinghouse holdings

The Med Chi Library has an extensive selection of books and periodicals dealing with performing arts medicine. As a vast number of patients participate in the performing arts on an amateur as well as professional basis, these holdings can provide the practicing physician with valuable information to assist in diagnosis and treatment, as well as prevention of injuries due to the performing arts. For information on clearinghouse holdings, contact Susuan Harman at 410-539-0872 or 800-492-1056.

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Transcripts of the Symposium on Care of the Professional Voice by Van Lawrence. New York: Voice Foundation, 1980-1985.

You are Your Instrument: The Definitive Musician's Guide to Practice and Performance by Julie Lyonn Lieberman. New York: Huiksi Music, 1991. ■

Odyssey: The history of performing arts medicine

Susan E. Harman, M.S.L.S., M.Ed.

ABSTRACT: *The first publication to summarize the occupational diseases of musicians was Ramazzini's* Diseases of Tradesmen *in 1713. While there was sporadic interest in performing arts medicine during the 1800s, the first book devoted to the subject, Singer's* Diseases of the Musical Profession, *was published in 1932. During the 1960s and 1970s, both physicians and performers became more interested in arts medicine. When pianists Gary Graffman and Leon Fleisher publicly discussed their career-ending hand problems in the early 1980s, a huge, previously unknown group of injured musicians was brought to light. Since that time, publication in the field has dramatically increased, numerous conferences have been held, and clinics catering to the needs to performers have been set up in various large cities. Although we still do not have all the answers to the problems faced by performing artists, arts medicine is now a recognized discipline, reaching out to performers, arts educators, arts administrators, and instrument manufacturers.*

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Depending on how one defines performing arts medicine, its history can go back to ancient times with the writings of Hippocrates and Galen on the physiology of the voice. Most experts, however, date the beginning of performing arts medicine to 1713. In that year, Bernardino Ramazzini published *Diseases of Tradesmen,* the first real summary of occupational diseases of musicians.[1]

Through the rest of the 18th and early 19th centuries, interest was sporadic, if publishing is any indication. In the latter part of the 19th century, a number of physicians became interested in musician's cramp as an extension of their work on writer's and telegrapher's cramp. George Vivian Poore, a British physician, did extensive research on what he called "pianist's breakdown."[2] It is interesting to note how closely his descriptions and conclusions resemble those found in today's overuse/focal dystonia disorders.[3]

In 1932, the English translation of *Diseases of the Music Profession: A Systematic Presentation of Their Causes, Symptoms and Methods of Treatment* appeared. Written by Kurt Singer, a German neurologist with an extensive music education, this was virtually the first book devoted to the subject. By today's standards it is outdated, but the book brought all

current knowledge together into one volume. Some of Singer's recommendations, such as rest, are still part of today's treatment program.[4]

Beyond these studies and a few others, it is difficult to locate publications on music medicine prior to computerized or systematic indexing. *Index Medicus,* an indispensable aid for physicians a century ago, listed few citations, English or foreign, between 1876 and 1966, when the National Library of Medicine began computerized indexing.

Surprisingly, from its first issue in 1949, *Music Index* included the subject heading "Occupational diseases and hazards." Most articles indexed in the next decade or two related to dental or vocal problems. Although musical and medical literature continued to be relatively sparse, it showed continued, if small-scale, interest.

The 1960s saw increased interest in hearing loss, perhaps spurred by the growth of rock and roll. Studies were quite contradictory, but many measurements recorded for rock and classical music were beyond standards of the Occupational Safety and Health Administration (OSHA).[5]

During this period, several short items and letters in music journals such as *Strad*[6] and the *Instrumentalist*[7] signaled more serious interest from musicians. Letters usually asked for information from injured musicians or tried to warn musicians of possible dangers. Medical literature began to feature case reports. Several widely read journals, such as the *New England Journal of Medicine*,[8] *British Medical Journal*,[9] and *Lancet*,[10] published numerous reports of occupational problems, often quaintly named. In what may be the first instance of cross-pollination, *Senza Sordino,* the newsletter of the International Conference of Symphony and Opera Musicians, reprinted several of these medical reports almost as soon as they appeared.[11]

By the late 1960s, physicians and musicians were showing a growing interest in performing arts medicine. There was, however, no real cooperation or direction. Several events occurred in the 1970s to focus attention on the field. In 1972, the Voice Foundation first sponsored what became an annual Care of the Professional Voice symposium. Transcripts of presentations by physicians, scientists, speech pathologists, teachers, and performers were published each year.[12]

Also in 1972, the Danube Symposium on Neurology, focusing on the neurology of music, was held in Vienna. As an outgrowth of this conference, *Music and the Brain: Studies in the Neurology of Music* by MacDonald Critchley and R. A. Henson was published in 1977.[13] While this was not a book on music medicine like Singer's, it did include a good deal of information on occupational diseases. Many experts date the birth of the music medicine field from this publication.[14]

Interest escalated during the rest of the decade. The major impetus came from injured performers and health care professionals who puzzled over how to help them. The bulk of physicians, musicians, and the general public was still unaware of any real problem.

In 1981, a *New York Times* article detailed hand difficulties experienced by pianists Gary Graffman and Leon Fleisher, and their frustrating search for solutions. Each eventually arrived at Massachusetts General Hospital, receiving care from a team led by Fred Hochberg, M.D.[15] Though neither found a complete or permanent cure, publicity regarding their experience brought to light a huge, previously unknown group of injured musicians.[16] The first published report of the clinic's experience, in the *Journal of the American Medical Association* in 1983, represented another landmark in performing arts medicine.[17]

During the 1980s, the field advanced rapidly. Another forward step was taken with the staging of conferences. Perhaps the most important was the Medical Problems of Musicians symposium, chaired by Alice Brandfonbrener, M.D., held in conjunction with the Aspen Music Festival in 1983.[18] The Aspen conference has become an annual symposium, now including dance medicine. Other conferences include the Biology of Music Making, the International Society for the Study of Tension in Performance conferences,[19] the International Center for Dance Orthopedics and Dance Therapy symposiums, and the Playing Less Hurt conferences.[20] Besides lectures by health professionals and demonstrations by musicians, these conferences often include presentations by various alternative therapists.

While the United States was perhaps the main center of performing arts medicine activity, there were also developments in Australia. This was mainly due to surgeon Hunter Fry, who surveyed large groups of musicians, developed a grading system for overuse, and published extensively.[21]

A growing number of performing arts medicine clinics were set up. Most are located in large cities with resident orchestras or ballets and are usually staffed by health professionals who are also performers.[22]

All these activities piqued the interest of musicians' unions. In 1985, the International Conference of Symphony and Opera Musicians (ICSOM) included a session on music medicine at its annual meeting.[23] Their newsletter, *Senza Sordino,* published numerous items on performing arts medicine,[24] as did *International Musician,* the newsletter of the American Federation of Musicians.[25]

Experts interested in performing arts medicine set up organizations devoted to the subject. These include the International Arts-Medicine Association (IAMA),[26] Performing Arts Medicine Association (PAMA),[27] Association of Medical Advisors to British Orchestras,[28] MedArt, Hearing Education and Awareness for Rockers (HEAR),[29] and the International Association for Dance Medicine and Science. Existing organizations also recognized the emergence of performing arts medicine. For example, the American College of Occupational and Environmental Medicine,[30] and the National Flute Association created sections or committees concerned with the topic.[31]

The time seemed right to launch a journal devoted to performing arts medicine. In 1986, *Medical Problems of Performing Artists (MPPA)* began publication with Alice Brandfonbrener, M.D. as editor. The journal's major purposes were to promote interest in performing arts medicine, stimulate research, and disseminate information.[32] Having a journal dedicated to the subject put the stamp of legitimacy on performing arts medicine as a specialty.

Besides publishing papers from the Aspen symposiums, *MPPA* provided a forum for an astonishing array of physicians,

allied health professionals, musicians, and alternative therapists. Many early articles detailed health problems prevalent among various subpopulations of performers. By 1988, one of the first articles on incidence appeared in *MPPA*.[33]

Perhaps one of the most important and certainly most quoted articles from *MPPA* concerns the ICSOM survey—a 1986 survey of each player in the 48 member orchestras. This survey will provide continuing study information for some time.[34]

While *MPPA* might be considered the premier journal in the field, it is not the only place progress is reported. The *Journal of Voice* began publication in 1987 and includes transcripts from Voice Foundation symposiums. Other journals focusing at least partially on arts medicine include *Kinesiology and Medicine for Dance* and the new *International Journal of Arts-Medicine*. In 1989, a review of the field by Alan Lockwood, M.D. appeared in the *New England Journal of Medicine*.[35] For many physicians, coverage in this prestigious journal signaled the arrival of performing arts medicine as a specialty.

In the 1990s, there is further evidence of this. The *Textbook of Performing Arts Medicine* is the first modern, comprehensive textbook on the topic. Published by Raven Press in 1990, it is edited by Robert Sataloff, M.D., Alice Brandfonbrener, M.D., and Richard Lederman, M.D., and includes chapters by foremost experts in the field.[36]

Publication in general has increased some 400% since Singer's book. Articles can be found in journals ranging from *People*[37] to *Journal of the Audio Engineering Society*.[38] It is not unusual to see performing arts medicine highlighted on television.[39]

The emphasis of publication and research is shifting toward prevention. This has lead to increased outreach by health professionals to performers, arts educators, instrument manufacturers, arts administrators, and other related groups.

We still do not have answers to all the problems performing artists face, but events of the last 10 years show that a body of knowledge is accumulating. It is the responsibility of experts in the field to pass this knowledge on to the next generation.

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Upper extremity disorders in performing artists

Leo M. Rozmaryn, M.D.

ABSTRACT: *Studies in the past decade have shown that a significant proportion of instrumentalists report musculoskeletal problems severely affecting their musical performance. Musicians endure daily intensive use of their upper extremities, frequently placing them in bizarre positions. Their training schedules are rigorous and long term Predisposing factors to, and treatment for, overuse syndromes, tendinitis, and tendon trauma commonly encountered by musical performers are discussed at length. Nerve entrapment has also surfaced as a major problem in musicians, and the means of evaluation and treatment and the role of surgery are put forth. Techniques for studying and analyzing the difficulties faced by instrumentalists are summarized.*

Dr. Rozmaryn is an orthopaedic and hand surgeon in Rockville, Maryland, and a member of the Med Chi Committee on Medicine and the Performing Arts.

Performing arts medicine is a distinct subset of occupational medicine. Its direct applications to upper extremity disorders of performing artists stem from approximately two decades of experience in dealing with special problems of athletes in sports medicine. Musicians, due to the nature of their vocation, present with an array of specialized problems. As a result of developing and maintaining a musical career, performers endure daily intensive use of their upper extremities, often placing them in bizarre positions. Performers frequently bear the weight of instruments on both hands with intense repetitive use of fingers, wrists, elbows, and shoulders. Speed and accuracy are of the essence. There is a strong element of competitiveness and an extraordinarily high demand on them.

While many sports careers end when athletes are in their late thirties or early forties, a musical career usually spans a lifetime of 70 or 80 years. Historically, musicians have been extremely misunderstood; for the most part, this is still true, but it is changing. Musicians frequently present to the uninitiated health care provider with a "mild injury." These mild injuries, however, may be potentially career-ending to the performer. A performer's skills are rarely transferrable to other fields, which may result in anxiety and depression. As opposed to many other occupational injuries, there is no secondary gain and these patients are fiercely driven to return to work. Litigation, workers' compensation, and malingering are rare in this group. Training schedules are rigorous and long-term, and there is a continuously increasing neuromuscular learning curve in this

setting. Even a mild injury can set musicians off from most of their repertoire.

Historically, there has been a lack of communication between the musician and physician. Frequently, the difficulty is simple jargon. Physical findings may be sparse and easily missed by the physician, especially those without a musical background. There is a need to watch musicians play, as symptoms may appear only during a performance. Even slight neuromuscular weaknesses can render finger joints unstable. Technical idiosyncracies can confound the evaluation of dystonia, compressive neuropathy, or overuse syndrome. There have been misconceptions on the part of the medical community that musicians are overemotional and that many of the presenting symptoms are psychosomatic. As more is learned, many problems are coming into sharper focus, and appropriate diagnosis and treatment are more frequently made today.

To date, relatively few epidemiologic studies have been conducted on this group of patients. The work has been primarily retrospective and descriptive, and little analytical work has been done to delineate problems. This too, however, is slowly changing. In 1988, Manchester[1] examined 246 university students and found 8.5 episodes of performance-related pain per 100 musicians. The male to female ratio was 2:1, and the keyboard/string to woodwind/brass ratio was 3:1. Tendinitis was seen in 16%. Overuse was seen in 50%. Seventy-one had an identifiable cause of performance-related pain, including increased playing time and changes in techniques and repertoire. Stress was a vital factor as problems increased close to recital times, in early fall at the beginning of the semester, and in late spring close to performance evaluations. These maladies occurred primarily in the 25- to 35-year-old age range, with hand and wrist problems encompassing 41% of the problems; neck, 38%; shoulder, 35%; forearm, 11%; and elbow, 10%.

In 1986, Martin Fishbein[2] surveyed 4,025 musicians. The response rate was 55%. Fifty-eight of the respondents reported musculoskeletal problems severely affecting performance, females more frequently than males. String players experienced greater difficulties than woodwind or brass. Of 1,378 string players, 10% had hand problems, primarily in the left hand. Wrist, forearm, and elbow problem distribution, however, was equal between left and right.

There is increased incidence of neck and shoulder problems in violinists and violists compared with cello and bass players. Seventy-five percent of pianists experienced right hand problems, while 34% had bilateral problems. Seventy-five percent of string instrumentalists had left hand problems, while 13% of flute and plucking instrumentalists experienced bilateral problems. Seventy-nine percent of woodwind instrumentalists had problems due to direct pressure on the right thumb. Forty-eight percent had entrapment neuropathy, 27% had overuse injury, and 15% had movement disorder.

Overuse syndromes

In 1992, Bengston and Schutt[3] reviewed a retrospective series of 73 musicians and found musicians' most common presenting diagnoses were overuse syndrome, tendinitis, focal dystonia, and nerve entrapment. This review will focus on overuse syndrome, tendinitis, and nerve entrapment in the upper extremities.

Lederman[4] described overuse syndrome as a constellation of symptoms associated with activity that exceeds the tissue's biological limits and leads to motor dysfunction. The most common symptoms are pain, weakness, tingling, fatigue, stiffness, and decreased dexterity.

Three concepts have been proposed to explain the cause of musculotendinous overuse. The first, advanced by Fry,[5] involves injury to muscles, tendons, ligaments, and joint capsules, and tendon sheath inflammation. Lederman[4] advocated the concept of injury to the musculotendinous junction secondary to overstretching of contracting muscles, known as eccentric contraction. Hochberg[6] advocated actual inflammation of the tenosynovium. The true nature of the pathology remains obscure as no pathologic dissection of the upper extremities has yet been done on musicians. What is known regarding overuse syndromes is that there is glycogen depletion in muscle, degeneration in muscle fiber, and edema. There is a relative increase in type I muscle fibers and a decrease in type II muscle fibers. Maximal voluntary contraction is diminished.[7]

A muscle is able to produce maximal work through its contraction when beginning at its resting length.[8] Furthermore, as one increases preload on a given muscle by exerting an external stretch, work capacity of the muscle decreases while potential for fatigue and eventual failure increases. Failure of muscle tendon units as a result of overuse usually can be detected at the musculotendinous junction.[9] Chronic submaximal stress may cause microtears at this junction, evoking a painful inflammatory response.

Predisposing factors include intrinsic and extrinsic phenomena. Intrinsic factors include the performer's physical strength, flexibility, size, anatomic variations, performing level, and playing style. For example, a long neck may present problems for violinists and violists. Small hands may get injured handling large instruments or playing pieces by Rachmaninoff, Paganini, Brahms, or Liszt. Many of these works were written for performers with large hands and hyperextensible joints. Hyperextensible joints, however, may be a problem since increased muscular effort is required to stabilize the distal joints of the hand, and this may cause musculotendinous overuse.

Extrinsic factors, such as time and intensity of playing or size and shape of the instrument, may affect the distribution of work load to the muscle groups involved. A sudden increase in practice time and intensity may stress and diffusely increase muscle tone. There may be a sudden change in technique, teacher, or instrument. Poor practice technique is also a culprit. Excessive repetition to master particularly difficult passages in a long program or continuous repetition of an entire program to learn the whole piece at once may be disastrous. A sudden change in repertoire—such as when a musician accustomed to the closed finger position of Mozart is suddenly confronted with the wide finger stretches of Brahms or Liszt—may also be detrimental. Music students may be misled into believing a

world-class career awaits them if they practice, when this may not be the case.

Tendinitis, tendon trauma, and overuse injuries

Tendinitis is a misused and overused term that does not truly point to an underlying pathologic condition. In the past, this constellation of problems has been called tenovaginitis, peritendinitis, tenosynovitis, intersection syndrome, deQuervain's syndrome, trigger finger, epicondylitis, rotator cuff impingement, repetitive strain disorder, cumulative trauma disorder, and tendon overuse injuries. These eponyms confuse patients and health care providers. Recent anatomic and pathologic studies classify this general condition into various subtypes:[10]

1. **Peritendinitis** describes an inflammation of the epitenon (outer layer of the tendon and its investing synovial sheath). The tissues present with local swelling, pain, crepitation, warmth, or generalized dysfunction.
2. **Peritendinitis with tendinosis** adds intratendonous degeneration with loss of collagen fiber orientation, scattered vascular ingrowth without obvious tendon inflammation, and tendon nodules.
3. **Tendinosis** describes intratendonous degeneration due to aging of microtrauma. It is noninflammatory and may present with nodule formation. This represents a loss of normal collagen fiber orientation and increased cellularity. This is also noted as mucoid degeneration.
4. **Tendinitis** is symptomatic tendon degeneration with an inflammatory response. This may be acute, subacute, or chronic, and can superimpose underlying tendinosis.

In any given situation, several processes may be operating at once. Patients present symptoms of focal pain, snapping, popping, swelling, tenderness, diminished dexterity, and occasional erythema. Initially, symptoms are mild and usually ignored. Symptoms may appear only during execution of specific techniques, such as seen in pianists playing octaves, chords, trills, and arpeggios. These involve wide finger stretches or chronic repetitive activity. Violinists or violists playing in higher positions require long finger stretches, chronic repetitive finger movement with the wrist in maximal flexion, supination, and ulnar deviation. Vibrato accentuates the problem. Symptoms frequently begin in the dorsum of the wrist and forearm, the origin of the extensor carpi radialis brevis at the lateral epicondyle of the humerus (tennis elbow), and the first dorsal extensor compartment known as deQuervain's syndrome.

Dorothy Taubman[11] described a scenario in pianists in which digital extensors may be affected because the hand is too close to the keyboard, necessitating metacarpophalangeal hyperextension with each finger stroke, which causes fatigue most commonly in the ring finger. On the flexor surface, digital flexors peritendinitis and tendinosis may cause painful digital or thumb triggering, although poor conditioning in athletes has been mentioned as a factor in tendon injury. In athletes, there are no objective criteria; the condition is probably multifactorial, having much to do with underlying tendon composition and duration and intensity of overload.

In 1986, Fry graded symptoms in five stages:[12]

- **Stage 1.** Pain at one site that is induced by playing and ceases after stopping
- **Stage 2.** Pain induced by playing, associated with weakness and loss of control
- **Stage 3.** Pain persisting after playing and induced by other activities
- **Stage 4.** Pain with activities of daily living
- **Stage 5.** Severe pain with no function

Performing artists may find themselves canceling performances, shortening practice times, and exhibiting serious deterioration in the ability to play. In many instances this problem may be self-limiting, but a significant number of days, months, or even years may pass before the musician seeks help. By this time, the patient is in deep despair.

Treatment of overuse injuries

As indicated by Fry[12] in 1986, treatment includes rest from all activities that initiate or perpetuate pain. This may include reducing the playing schedule and modifying harmful practice and performance techniques. The amount and quantity of rest may relate to the severity of symptoms. Initially, rest may include a short period of splinting, systemic or topical anti-inflammatories, and physical therapy that may emphasize thermal modalities, heat or ice, or iontophoresis. A program of stretching and strengthening exercises should begin very gently and slowly. Gentle passive, active, and active-assist range of motion exercises should slowly progress to resistive exercises. In selected refractory cases, local cortisone injection may be indicated. Rarely, surgery may be required. Modifications to activities of daily living are helpful. Some activities unrelated to performance perpetuate symptoms. A common aspect of physical training is the performance of specific exercises to stretch out the muscle-tendon complexes most involved in a given activity.

The efficacy of a muscle-stretching regimen to prevent injury and increase efficiency of performance has been well demonstrated by athletes.[13] The same is undoubtedly true for musicians. Stretching increases muscle flexibility, maintains range of motion, and increases the strength of the musculotendinous unit, permitting it to more efficiently store energy and contract. It is critical to return to playing slowly. Early overuse can be detrimental physically and psychologically and may ultimately delay return to full performance.

It has been well shown in the laboratory that immobilization deconditions muscles, tendons, and ligaments. Human muscle biopsy studies show that type I muscle fibers atrophy with immobilization.[14] Their cross section decreases, and the potential for oxidative enzyme activity is reduced. Aerobic capacity of the muscle fibers rapidly decreases, primarily in fiber types affected by the chosen sport. For example, type I (slow twitch) fibers are affected in marathon runners, while type II (fast twitch) fibers are affected in athletes engaged in activities that require speed.[15] The same is true for performing artists.

A progressive program of stretching, strengthening, and conditioning is initiated. Prior to muscular exercise, prestretching increases efficiency and work capacity of the contractile components of skeletal muscle. Heat also causes greater enzymatic activity and less metabolism, increasing the efficiency of muscle contraction. There is also an increase in collagen elasticity and the force production capacity of muscle. Essentially, this is the basis of the warm-up.

Many programs have been proposed for return to playing. For example, in 1991, Richard Norris recommended starting with slow, easy pieces and gradually progressing to faster, more difficult ones. Some musicians start with two 5-minute intervals separated by a 60-minute rest interval, progressing over a period of 30 to 70 days to a maximum of 50 minutes of playing with a minimum of 10 minutes rest in between. Others start with 2 minutes per day for two days, accelerating to 3 minutes daily up to 25 minutes with 5-minute breaks. The common denominator is the onset of a rest period at the first sign of fatigue. Many high-pressure professionals are unable to initiate complete rest for a period of 12 weeks as recommended. They may start with two weeks of complete rest and then a graded return.[16]

Close attention must be given to instrument design and the elimination of maladaptive playing styles. This must be done under the auspices of an experienced music instructor. For example, Dorothy Taubman[11] observed that playing piano with curled fingers is clearly more stressful than playing with straight fingers. Great masters like Vladimir Horowitz discovered this on their own, and Horowitz played with straight fingers his whole life. Striking a piano key is primarily a flexion of the metacarpophalangeal joint. Doing so with the proximal and distal interphalangeal joints flexed pre-stresses and strains the intrinsic muscles, causing extrinsic contraction to the lumbricals and interossei. This predisposes muscle tendon units to fatigue and injury. Attention must be turned toward the correcting of improper posture and the economy of muscle action in the upper extremity, eliminating unnecessary and inefficient muscle contractions. This is the basis of the Alexander[17] and Feldenkrais[18] techniques. Usually, with distal overuse, proximal upper extremity musculature is neglected and needs to be stretched, strengthened, and conditioned, including the trapezius, rhomboids, supraspinatus, serratus anterior, and levator scapular muscles. Paraspinal muscles in the neck need to be addressed also.

Extremity or instrumental orthotics may unload compressed areas, allowing instrument weight to be borne by more proximal muscle groups, such as the trunk or the floor. This facilitates playing by allowing the neck or upper extremity to be placed in a more comfortable position. Occasionally, the instrument's shape may be altered to facilitate playing. This may range from playing with a lighter viola to playing with a curved flute. A custom-molded chin and clavicle rest for the violin or viola may make supporting the instrument with the head and neck effortless, reducing the necessity for extreme neck flexion or anterior rotation of the shoulder girdle, which lead to fatigue, pain, and neuropathy. Significant comfort can be achieved by simple modification without compromising performance quality. In general, with appropriate treatment, 60% to 90% of these musicians eventually return to full performance schedules.[19]

Nerve entrapment syndromes

Initially thought to be rare in musicians, nerve entrapment syndromes have surfaced as a major problem. Twenty percent of patients presenting with upper extremity complaints to performing arts clinics in this country have compressive neuropathies.

As peripheral nerves travel from the intervertebral foramen to sensory receptors or motor endplates, they pass through anatomically tight spaces at various levels in the extremity. These spaces are bounded by fibrous tissue and or bone. Peripheral nerves slide back and forth as extremities flex and extend at various joints. For example, chronic repetitive movement of the arm in positions that increase overall pressure in these fiber osseous tunnels leads to local ischemia of the nerve and myelin nerve sheath. Secondary inflammation accentuates the problem, causing formation of a constricting scar around these fibrous tunnels and creating intrafascicular edema within the nerve. If this continues, writing becomes jeopardized and the nerve becomes tethered, causing microtears and stretching injuries. This may cause demyelination, which may or may not be reversible. Musicians are particularly susceptible to this type of nerve injury.

Maintenance of stressful, proximal muscle girdle postures, while executing rapid finger movement, may cause this problem in violinists and violists. Cervical nerve roots become compressed by bone or disc material that escapes into the intervertebral foramen, where cervical roots exit. Another source of compression is degenerative joint disease in the neck. This is common in violinists because of the tendency to have their necks flexed and turned to the left side.

At the brachial plexus level, nerves may become compressed by a cervical rib or under the tendon of the pectoralis minor, known as thoracic outlet syndrome. More distally, the ulnar nerve may be compressed at elbow level (cubital tunnel syndrome) or at the wrist's canal of Guyon. At the same time, the median nerve can be trapped in the elbow's pronator inlet, or more commonly, in the wrist's carpal tunnel. The radial nerve compresses in the radial tunnel of the proximal forearm. This may present with motor palsy of the posterior interosseus nerve or a pain syndrome known as radial tunnel syndrome, which may be associated with tendinitis at the origin of the extensor carpi radialis brevis. Digital nerves may become compressed because of their subcutaneous position. A flute or clarinet may cause direct pressure on the side of the finger, causing nerve compromise. Playing the English horn, while suspending it in the air, may cause ulnar nerve compression secondary to extreme positions of elbow flexion.

Thoracic outlet syndrome in flutists is quite common. Reducing hyperabduction of the right shoulder and diminishing internal rotation of the left shoulder can be quite helpful. Cervical radiculopathy is found in keyboard players primarily on the right side and in violinists on the left side. This is associated with the neck being tilted four to six hours daily.

Symptoms in these conditions include painful numbness

(dysesthesia), weakness, loss of dexterity, and a sense of "swelling or perked circulation." Duration of symptoms varies from several days to years and may be continuous or intermittent. In chronic cases, trophic changes in the hand and arm may result in frank muscle atrophy and complete loss of movement. Discomfort usually begins at a specific site and may radiate proximally and distally on the arm. Multiple nerves may become involved, or a single nerve may be compressed in more than one location (double crush syndrome). Compression of a peripheral nerve in one location may sensitize it, making it more susceptible to compression at another site.[20]

Evaluation of nerve entrapment syndromes

A thorough history must be obtained. Underlying metabolic disorders, such as diabetes, alcoholism, thyroid dysfunction, or rheumatoid disorders, must be elicited. A complete work history, related or not to performing arts, must be sought along with possible old acute trauma. The possibility of primary nerve disease or syringomyelia must not be forgotten. A comprehensive physical examination completes the initial evaluation.

In evaluating performing artists, one must see them in action. I have had musicians play for me in bathing or aerobic exercise attire to fully evaluate posture, position of the neck and shoulder girdle, and relative positions of both arms to the fingertips. If a specific set of movements brings on a symptom, I elicit this directly. I have patients exhibit a broad range of playing techniques. While I do not pretend to be a music instructor, I comment on specific techniques liable to cause muscle tendon strain or nerve compression. A thorough neurological exam includes evaluation of sensory and motor function, reflexes, and the presence or absence of pseudomotor signs, such as skin tone, color changes, sweat patterns, swelling, skin turgor, or rigidity. Sensory function is evaluated by testing sharp/dull perception, two-point discrimination, stereognosis, threshold light touch perception, static and moving two-point discrimination, and vibratory perception and position. Motor function is evaluated by testing specific muscles and muscle groups in the hand, forearm, elbow, upper arm, and neck.

There are a battery of provocative tests that increase the pressure across the particular fiber osseous tunnel one wishes to study. The Phalen's test involves passive wrist flexion at 90 degrees for 45 seconds for the median and ulnar nerve at the wrist. The elbow flexion test involves full supination and flexion of greater than 120 degrees for one minute for the cubital tunnel at the elbow. Supination against resistance or resisted middle finger extension tests for radial tunnel syndrome. One evaluates pronator syndrome by resisted finger flexion and forearm pronation with direct percussion over the anterior elbow. Dysesthesia caused by any of these maneuvers constitutes a positive exam. Tinel's test, involving direct percussion of the nerve at the area of possible compression, is less specific or sensitive. The thoracic outlet may be evaluated by Adson's test—the disappearance of the ipsilateral radial pulse when the involved arm is maximally elevated to shoulder level with the neck tilted and turned in the direction of the arm.

Treatment of nerve entrapment syndromes

Once a clinical diagnosis is made, a period of relative rest and splinting is followed by rehabilitation. A therapist may desensitize the hand and arm with various modalities and facilitate nerve gliding with special exercises. Tendon and ligament stretching exercises are followed by a muscle- strengthening program. Special instructions are given to facilitate activities of daily living. Performance and practice modifications are discussed, and a specific plan for return to play is instituted. Night splinting can continue for several months if needed. Most patients respond well to this protocol. For some, more aggressive treatment may be needed. Other conservative modalities include nonsteroidal anti-inflammatories and oral or injected steroids. With the latter, care must be taken to avoid intratendonous or intraneural injection, which may cause permanent damage.

Thoracic outlet syndrome is usually treated with a vigorous program of stretching and strengthening the anterior and posterior shoulder girdle muscle and paraspinal musculature. Surgery is almost never recommended in thoracic outlet syndrome.

Role of surgery in the treatment of performing artists

Many consider surgery a last resort. Musicians usually present late in the course for surgical treatment. I believe there are several reasons for this:

- Every music teacher or nonsurgical arts medicine practitioner has at least one horror story about a poorly indicated or badly performed operation that resulted in a crippling, career-ending outcome.
- There is general ignorance about potential benefits of well-performed surgery.
- Patients have a fear of being out of control during surgery and think they will never be the same after the operation.

In 1992, Dawson[21] outlined indications for surgical treatment of musicians. They include the release of refractory stenosed tenosynovitis in wrists or digital tendons—deQuervain's syndrome or trigger digits and compressive neuropathy not responsive to conservative measures.

Nonperformance-related conditions may have an impact on performance and may be amenable to surgical correction. I recently treated a pianist for a crippling digital osteoarthritis of the proximal interphalangeal joints with arthrodesis. In a short time, she returned to playing comfortably. She had come to me after several years of playing with significant pain. Prominent music educators told her the problem was poor playing technique and to avoid surgery at all cost.

Other conditions, such as Dupuytren's contracture, have no nonsurgical treatment and, if allowed to progress unimpeded, will end the instrumental musician's career. In many upper-extremity trauma or tumor situations, surgery is the conservative approach. It allows earlier joint mobilization and muscle retraining, facilitating an early return to performing. Surgery is a valuable adjunct in our armamentarium. While it should be used judiciously to achieve maximal benefit, it should never be dismissed.

Techniques of study

Communication is increasing between the conservatory and clinic. The fruits of this ever increasing cooperation are increasingly evident. These issues are being examined in the laboratory as well. Frequently, musicians can demonstrate difficulties to physicians and music teachers simultaneously. Video increases musicians' awareness of the subtleties of their playing techniques, helping musicians correct inefficient movements that can cause a repetitive strain problem. Pioneers, such as Dorothy Taubman, devoted a lifetime to studying playing techniques in the interest of preventing injury and treating already injured musicians.

Ultimately, much of what we will know about these problems will emanate from the laboratory. Over the past 20 years, force transducers, multichannel electromyograms (EMGs), video imagers, computer simulations, biofeedback, and an array of highly sophisticated biomechanical techniques previously used for the analysis of gait and throwing arm are now being focused toward the biomechanical underpinnings of musical technique. In trying to more clearly understand muscle groups involved with such discreet movement, techniques have been adapted for piano, flute, clarinet, brass, and percussion. Increasing attention is also focused toward popular musicians as they slowly enter the fold of music medicine. In coming years, we anticipate a flood of theoretical and practical information to treat injured musicians and, more importantly, to prevent problems.

The musical community needs to understand that they are essentially high-powered athletes. Organized conditioning programs must be a part of musical training on individual and institutional levels. Multidisciplinary approaches toward music education have been very successful in Europe for the past 15 years.

Performing artists need to train muscle groups they use most often and maintain excellent aerobic fitness, similar to professional football players or marathon runners. While demands are different, they are certainly no less stressful. This realization goes a long way in preventing performance-related musculoskeletal problems in musicians.

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Med Chi Bicentennial Celebrations

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Myofascial pain: The great mimicker and potentiator of other diseases in the performing artist

Norman B. Rosen, M.D.

ABSTRACT: *The performing artist often sustains a variety of neuromusculoskeletal problems that interfere with the ability to play or perform. Although many of these conditions occur as a result of overuse or misuse, other causes should be kept in mind—particularly when pain problems persist, recur, or do not respond to usual therapeutic measures. Chief among these are myofascial pain syndromes. These are quite common but are often overlooked, despite the fact that they can cause, potentiate the dysfunction of, and mimic other conditions. This article presents an overview of myofascial pain and dysfunction—particularly as it pertains to neuromusculoskeletal pain and disability in musicians and performing artists.*

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The performing artist is often subject to a variety of medical conditions and illnesses that can interfere with the ability to play an instrument and to express artistic skills to their greatest extent.

Among these are conditions involving the neuromusculoskeletal system that can cause pain, cramps, weakness, stiffness, dysesthesia, and loss of agility, coordination, endurance, and control. These problems are usually caused by conditions such as tendinitis, bursitis, entrapment neuropathy, or overuse[1] and misuse syndromes.

Surprisingly, little mention is made in music or sports medicine literature of myofascial pain and dysfunction, even though these syndromes are ubiquitous[2–4] and often coexist with, complicate the management of, or mimic other diagnoses and conditions.[5–6] As a result of clinicians' failure to recognize and understand myofascial pain syndromes, and to correct the underlying dysfunctions, treatment programs are often prolonged or unsuccessful. When conservative treatment fails, surgical intervention is often recommended as the last resort, with predictable "less-than-good" outcomes.[5,7]

For the performing artist—particularly the professional who must excel for financial and professional reasons—slow or failed treatment can have disastrous consequences, resulting in career-ending or career-modifying illnesses. It is critical for the clinician who works with performing artists to clearly understand the underlying pathophysiology and to be aware of the myofascial pain and dysfunction invariably present in most cases of persistent or refractory clinical presentations.

There are two main reasons clinicians fail to recognize and appreciate the significance of myofascial pain syndromes in the pathogenesis of recurring disability. First, diagnosis of myofascial pain and dysfunction is essentially clinical and depends on the assessment and recognition of many subtle physical findings (**Table 1**).[8] In particular, the phenomenon of referred pain and tenderness[8] can often lead the patient and practitioner away from a correct diagnosis. The pain and tenderness may emanate from a remote source, usually a "trigger" point in a distant muscle. The trigger point is so named because of its ability to trigger referred pain and tenderness in remote areas.[8] Just because a tissue is painful or tender does not mean that the tissue is pathologically involved; rather, the pain may be a referred manifestation emanating from another source.[9] Each muscle in the body is capable of developing its own pattern of referred pain and tenderness to other areas of the body.[10] Failure to recognize that local pain and tenderness may be referred from a remote source invariably results in misdiagnosis or misplaced emphasis in treatment. This may even result in inappropriate surgery.[5]

The second major reason for failure to recognize the existence of myofascial pain syndromes is that clinicians often forget that pain and tissue dysfunction are separate clinical problems.[6] Although pain is usually the reason patients seek medical attention, pain and pain perception may be due to factors other than local pathology or tissue dysfunction, and may resolve while underlying tissue dysfunction is only partially corrected. On the other hand, tissue dysfunction may exist independently of pain, and may be manifested by tissue tightness, tissue weakness, restricted range of motion of muscle and joint, agonistic and antagonistic muscle imbalance, or localized muscle dysfunction caused by misalignment of forces; subtle or gross changes in nutritional, metabolic, or other intrinsic or extrinsic environments of the muscle; or neurological or vascular factors.[11] Too often, patients and practitioners settle for pain relief as the primary goal, ignoring residual tissue dysfunction and dismissing it as trivial. Yet, the most common cause of recurring pain and disability is due to the fact that the underlying tissue dysfunctions have not been corrected completely, even though the pain has subsided. The most important goal of successful rehabilitation is not pain relief, but restoration of a normal range of motion to the tissues and the achievement of strength and endurance in all members of the myotatic unit. For the performing artist, achieving these goals is critical for meeting professional and artistic responsibilities, and for avoiding recurring breakdowns.

Table 1. Characteristics of myofascial pain

- History of muscle pain, tenderness, stiffness, aching, gelling, tightness, numbness, tingling, weakness, or coolness
- May be localized or generalized
- Localized areas of muscular ropiness and hardening (taut band)
- Areas of localized tenderness within the taut band (trigger point)
- Compression of the trigger point results in referred pain and tenderness to areas remote from that trigger area; can also cause local tenderness
- Local twitch response elicited on snapping or needling the taut band
- Characteristic pattern of referred pain and tenderness for each trigger point
- Weakness of involved muscle or muscles harboring trigger points (may be subtle)
- Loss of joint range of motion (may be subtle)
- Immediate reversal of weakness and improved range of motion following inactivation of the trigger point
- Autonomic components: Vasoconstriction or vasodilation locally, and vasoconstriction in the area of referral
- Epiphenomena: nerve, tendon, or blood vessel entrapment; deconditioning; psychosocial dysfunction including anxiety, depression, fear of activity (actophobia or kinesophobia)

Two physiological principles support the importance of achieving a full-balanced range of motion across a joint. The first is the concept of "preload stretch," and the second is the concept of "reciprocal relaxation."

Preload stretching of a muscle allows increased strength as a result of a more favorable length-tension relationship. Reciprocal relaxation of the agonist and antagonist allows muscles to rest and recover from work demands, facilitating endurance. Muscles inadequately stretched or unrested lose strength and endurance, predisposing them to premature breakdown.

Unfortunately, many clinicians view residual tightness following treatment as acceptable, despite the fact that this tightness and loss of range of motion set the stage for recurring breakdown and disability. The skillful performing artist often compensates for residual tightness by overloading other tissues, which paradoxically subjects them to premature breakdown and the development of other patterns of dysfunction, complicating the overall clinical picture—particularly when the patient returns with recurring pain and dysfunction following a subsequent "re-injury."

Potentiator and mimicker of other diagnoses

Myofascial pain syndromes, through a variety of physiological mechanisms, can cause alternative diagnoses including tendinitis, bursitis, entrapment neuropathy, overuse syndromes, and even arthritis. In addition, myofascial pain syndromes can co-exist with and potentiate overall dysfunction in the patient with these other diagnoses. They mimic other diagnoses through the mechanism of referred pain and tenderness mentioned earlier. Although the mechanism of referred pain and tenderness is still not clearly defined, there is ample clinical evidence in the literature documenting this manifestation.[8–10,12–16] It is well accepted that areas of myofascial pain trigger unique patterns of referred pain and tenderness to remote tissues. For example, pain and tenderness in the wrist or hand may not be coming from locally sensitive or tender tissues, but from proximal sites, such as muscles of the forearm, shoulder, chest, or neck. Similarly, pain in the lower extremity

allegedly due to sciatica, may not be due to entrapment of the sciatic nerve, but may be occuring as a referred phenomenon from any muscle of the buttock or low back, mimicking true sciatica. Similarly, dysfunction of the shoulder, low back, head, neck, or foot may not be due to local problems such as nerve impingement, disc herniation, arthritis, tendinitis, radiculopathy, or joint degeneration, but may be the result of myofascial pain and dysfunction in more proximal (rarely distal) muscle sites. **Table 2** lists conditions myofascial pain syndromes can cause or mimic.

When faced with these clinical presentations, the clinician should conduct a meticulous search for myofascial dysfunction in the distribution of the area of pain, looking for myofascial foci that cause, mimic, or potentiate these patterns and dysfunctions.

Table 3 summarizes various manifestations of myofascial pain syndromes in terms of local, remote, and autonomic manifestations, and their ability to cause a variety of epiphenomena. These epiphenomena may occur as a result of direct mechanical compression of other tissues by the taut bands locally[9,10] or by causing a host of superimposed physical and emotional deteriorations as a result of deconditioning, fear, pain, and disuse.[17,18]

Autonomy and the spread of dysfunction

Two enigmatic aspects of myofascial pain and dysfunction should be commented on at this time. First is the ability of myofascial pain syndromes to develop an autonomy and persist as independent foci—even though initial contributing factors are no longer present or operant.[8] Although myofascial pain and dysfunction generally occur secondary to other phenomena, once established, they can persist and function autonomously even though the underlying cause is no longer present or active. Successful treatment depends on eradicating the trigger point area and its cause. Treatment of the trigger point alone may not be successful unless causative factors are also eradicated or modified. Conversely, treating the cause of the trigger point without simultaneously eradicating the trigger point itself can also lead to failure. Many cases of persistent pain, including pain following surgery, are due to the failure to eradicate secondary trigger point manifestations in the tissues while eradicating the initial cause of the myofascial dysfunction. Once developed, the same trigger point phenomenon recurs more easily when the patient is exposed to mechanical, structural, hormonal, or emotional sensitizers. Periodic reassessment of the patient with myofascial pain helps ensures that the patient is performing a home exercise program for adequate posture, flexibility, and strength.

The second enigmatic manifestation of myofascial pain is its tendency to seemingly spread, causing dysfunction in remote tissues. It is not yet understood whether this is a reflection of concomitant breakdown in marginally adjusted tissues or breakdown due to referred motor sensitization from an initial focus of irritability, but spread of dysfunction is well appreciated and well documented. Overlapping referred motor and sensory pathways, concurrent deconditioning, and incomplete rehabilitation—alone or in combination—are all explanations for spread of dysfunction.

Table 2. Conditions myofascial pain may cause or mimic

- Headache
  - Migraine
  - Tension
  - Spinal
  - Sinus
  - Temporal
  - Occipital
- Earache
- Temporomandibular (TMJ) joint pain
- Arthritis
- Nerve entrapment
  - Thoracic outlet
  - Ulnar
  - Median
  - Lateral femoral cutaneous
  - Sciatic
  - Peroneal
- Bursitis
- Pericapsulitis
- Radiculopathy
  - Cervical
  - Thoracic
  - Lumbosacral
- Tendinitis
- Muscle injury
- Adhesions
- Failed surgery
- Postsurgical scars and neuromatosis
- Cardiac
- Renal colic
- Bladder or other viscus
- Meniscus tear
- Shin splints
- Compartment syndrome
- Postphlebitic syndrome
- Plantar fasciitis
- Heel pain

Table 3. Manifestations of myofascial pain

- Local manifestations
  - Taut band
  - Trigger point
  - Local twitch response
  - Localized weakness
  - Localized loss of joint range of motion
- Remote manifestations
  - Referred sensory (pain and tenderness)
  - Referred motor (sensitization and spread of dysfunction)
- Autonomic manifestations
  - Local vasoconstriction and/or vasodilation
  - Referred vasoconstriction
- Epiphenomenon
  - Nerve, tendon, or blood vessel entrapment
  - Deconditioning
  - Psychosocial dysfunction (reactive)

The myotatic unit

Muscles do not operate independently. For every prime mover (agonist), there is an antagonistic muscle response that modifies or stabilizes its activity. In addition, a variety of co-movers assist the primary mover in its desired activity. Since all movement, particularly loaded movement, requires some degree of proximal stabilization, other muscles of the synergistic unit, including proximal stabilizers, often are subject to overload phenomena and mechanical or somatic dysfunction. This results not only from overload or overuse but from the mechanisms of referred muscle sensitization discussed earlier, as well as a variety of neurocirculatory influences.[8–10,15–16] All these interactions are

under exquisite central and sympathetic nervous system control, and are dependent on speed, load, and energy. Whether sensitization is mediated through the central nervous system, sympathetic nervous system, or mechanisms involving the myofascial network, the end result is often a spread of dysfunction seemingly independent of the initial event.

The primary cause of musculoskeletal system dysfunction is an imbalance of forces between agonistic and antagonistic muscles. This may or may not involve joints, but whenever there is an imbalance between tissues, they become overloaded and subject to breakdown. Whether this breakdown occurs secondary to improper use or abnormal loads imposed upon muscles or joints incapable of withstanding these "critical loads,"[6] dysfunction occurs when critical load capacity is exceeded, resulting in fatigue and subsequent breakdown (**Table 4**). This occurs as a result of localized changes in the metabolism of specific sarcomeres that are overloaded, injured, or stressed—perhaps as a result of local hypoxia under sympathetic control.[15,16]

Although tissue damage has not been consistently reported on routine muscle biopsies, some changes have been reported on electron microscopic studies, suggesting dysfunction at a microcellular level.[19] Local hypoxia has been postulated to be present at this area of breakdown,[15,16] and thermistor studies reveal increased temperature at dysfunction sites.[9] It is not clear whether this temperature increase is due to stasis from decreased removal of metabolic wastes or secondary to chemical changes occuring at the presumed site of microtrauma. Clearly, however, metabolic distress occurs in the tissues at a localized level.[15,16] Simultaneously, muscle contracture occurs at this area, resulting in a taut band that is palpated clinically. Electron microscope studies show fibers bunching up within the taut band region, and this phenomenon appears to be energy dependent. It may also provide a clue to the treatment of myofascial pain since, by stretching out the taut band, release of tightness can occur.[15]

Other diagnostic considerations

When a condition is misdiagnosed, many other inappropriate diagnoses and labels are often applied to patients with these conditions, particularly when the patients present confusing and widespread complaints. When a clinician is faced with a patient with widespread enigmatic pain and dysfunction that cannot be readily explained, there is an unfortunate tendency to impugn the patient's motivation to wellness or to question his or her psychological balance or need to satisfy secondary gains. Although some patients use musculoskeletal pain as a vehicle to express hidden agendas and secondary needs, it is still necessary to address and resolve these various presentation components to more effectively restore the individual to a functioning lifestyle. Once underlying myofascial pain and dysfunction are recognized and treated, it is easier to unravel the associated emotional or social disability that often accompanies persistent dysfunction.[18] It is critical to recognize and adequately treat the physical and the emotional components in patients with musculoskeletal pain and concurrent emotional lability. It is particularly important to recognize underlying physical disability before ascribing residual disability to emotional factors alone.[5,7,9,10]

Proper diagnosis is further complicated by the fact that, for about 90 years, there has been considerable confusion as to various terminologies used to describe patients with musculoskeletal pain—particularly, diffuse or widespread musculoskeletal pain.[2,15,16,20] The term "fibrositis" was first applied

Table 4. Factors affecting the critical load

- Alignment/structure/posture
- Static and dynamic loading forces
- "Use" syndromes
- Hyperlaxity
- Balance between agonist and antagonist
- Internal milieux and muscle set factors
  - Length/tension relationship
  - Nutrition
  - Energy supply
  - Circulation
  - Sympathetic nervous system
  - Temperature
  - Other perpetuating factors (**Table 7**)
  - Psychosocial modulators
- External milieux factors
  - Physical and emotional stresses
  - Environmental factors
  - Temperature
  - Coexisting entrapment neuropathy

Table 5. Classification of the common muscle pain diseases

- Fibromyalgia, presumed primary disease of muscle
- Myofascial pain syndromes, with or without secondary joint dysfunction
- Primary articular dysfunction with secondary muscular dysfunction
  - Inflammatory
  - Mechanical/structural
  - Autoimmune, connective tissue, vasculitis
  - Infectious
  - Metabolic/endocrine
- Rheumatic pain modulation disorder (sleep deprivation)
- Metabolic, endocrine, electrolyte, or inherited defect
- Infectious
- Inflammatory, autoimmune
- Neurological
- Trauma
- Neoplasm
- Toxic
- Psychogenic, true tension myalgia, conversion reaction, psychophysiological reaction of the musculoskeletal system
- Reactive—tendinitis, bursitis, spasm

to this spectrum of conditions by Gowers in 1904.[21] Fibrositis initially applied to a localized form of musculoskeletal dysfunction in the lower back. Over the years, the term came to include musculoskeletal pain and dysfunction from almost any cause, including true psychophysiological musculoskeletal pain in which no objective lesions could be ascertained. Because of the subtlety of most objective clinical findings in these patients, most textbooks of the 1950s and 1960s considered fibrositis as psychogenic disease. From a current perspective, this is clearly inappropriate. We now recognize multiple subgroups of patients with localized or generalized muscle pain and dysfunction (**Table 5**).

Many experts today only use the term fibrositis in a historical sense.[15] In 1981, Yunus and his coworkers redefined the widespread form of muscle pain as "fibromyalgia,"[22,23] and this term is now accepted as the most appropriate. Localized forms of muscle pain labeled as "myofascial pain syndromes" by Travell and Rinzler in 1952 continue to be viewed as separate conditions. There is, however, still considerable controversy as to whether localized forms of fibrositis are separate conditions or limited forms of the more generalized spectrum of musculoskeletal dysfunction now classified as fibromyalgia. Some researchers still suggest all these conditions reflect psychophysiological distress and are merely conversion reactions with the musculoskeletal system as the target. There are, in fact, patients in whom psychophysiological distress is primary, but this constitutes a small, but challenging, subgroup of chronic pain patients. The vast majority of patients with localized or generalized muscle pain can be subdivided as listed in **Table 5**. Time and space do not permit an in-depth review of this controversy, but it is apparent that the disease formerly known as fibrositis constitutes a very complex differential diagnosis. The clinician should keep this in mind when dealing with a patient with musculoskeletal pain and dysfunction.

Myofascial pain syndromes, as described by Travell and Rinzler in 1952, generally present as single muscle, local, or regional dysfunctions. They may, on occasion, be multifocal or generalized in nature (**Table 6**).[6] When widespread involvement occurs, these syndromes are easily confused with fibromyalgia. It is important to look for so-called perpetuating factors, which include a variety of mechanical, structural, and metabolic conditions, perpetuating underlying myofascial pain and dysfunction (**Table 7**).[9,10] For the most part, myofascial pain syndromes are more responsive to treatment than fibromyalgia, although persistent cases of myofascial pain do exist and are quite challenging.

Muscle, joint, and psychological tension states

That muscular pain occurs in a setting of joint dysfunction has been well documented, particularly in osteopathic and chiropractic literature. There is abundant clinical evidence that, by correcting underlying articular dysfunction, secondary muscle pain is often abolished. There seems to be ample evidence, therefore, to include articular dysfunction with secondary muscle pain as a third category of diffuse muscle pain disease. Psychogenic tension can create primary muscle dysfunction in many individuals. The clinician, however, is cautioned to restrict use of the term "tension myalgia" to that subset of patients in whom true psychic distress is the cause of, rather than reaction to, tissue dysfunction.

Sleep deprivation

In 1984, Dr. Harvey Moldofsky pointed out that chronic sleep deprivation alone can cause generalized muscle pain and widespread tenderness, satisfying current American Rheumatism Association (ARA) criteria for a fibromyalgia diagnosis. In his patients, generalized pain disorder and widespread muscle tenderness was reversed merely by restoration of normal sleep. He coined the phrase "rheumatic pain modulation disorder" to explain this subgroup of patients with symptoms suggesting fibromyalgia, but whose symptoms were purely sleep-related.

Many patients with chronic fatigue syndrome also have generalized point tenderness in multiple areas, satisfying ARA criteria for fibromyalgia, even though pain itself may not be a major component.

Overuse versus overload

In the last decade or so, three additional terms have been applied to patients with focal or regional muscular dysfunction.

Table 6. Classification of myofascial pain syndromes

- Single muscle involvement
- Focal involvement (two or more muscles involved around a single joint)
- Regional involvement (two or more muscles involved and two or more joints involved in a single region of the body)
- Multifocal or multiregional involvement (two or more apparently unrelated regions of the body involved)
- Generalized involvement
  - Primary muscle (fibromyalgia or other inherited genetic defect)
  - Secondary muscle (thyroid deficiency; vitamin deficiency; other hormonal, nutritional or endocrine dysfunction; mechanical; structural; postural; vasculitis; sleep deprivation; polyarticular dysfunction)

Table 7. Perpetuating factors

- Mechanical/structural/ postural
- Nutritional
- Metabolic/endocrine
- Electrolyte
- Infection
- Neurocirculatory factors
- External compression
- Allergy
- Environmental (equipment/ temperature)
- Sleep deprivation
- Anemia
- Emotional stress
- Other concurrent disease, including fibromyalgia

These terms include overuse syndromes, "cumulative trauma syndromes," and "repetitive strain syndromes." In each of these syndromes, a parameter of use or overuse is a factor. None of these terms, however, are truly sufficient to adequately define the underlying clinical picture presented by many of these patients. Use issues are only one component of a wider picture of dysfunction relative to the ability of tissues to withstand varying usages and loads. Conceptually, it may be more appropriate to consider these as "overload syndromes,"[24] because load implies work capacity and introduces a variety of additional therapeutic variables (**Table 4**). Space does not permit an in-depth discussion of these issues, but the reader can refer to other reviews on this topic.[8–10,15,16,20,25,26]

Summary

Although it is essential for the clinician to adequately examine and treat patients for all signs of dysfunction, this is even more critical in the performing artist. Failed treatment and misdiagnosis can have a devastating impact on the career and artistry of the performer. An in-depth understanding of the nature and causes of myofascial pain and dysfunction is critical—not only in terms of making appropriate diagnosis, but also in restoring performing artists to their craft as quickly as possible. Pain is only an underlying symptom of musculoskeletal dysfunction, and that dysfunction is the result of imbalance between agonistic and antagonistic muscles that resets the joint range of motion and produces abnormal tissue tension. Because the performing artist's career and artistry demands excellence, treatment is often required beyond the point of merely alleviating pain. It must also be directed to restoration of as normal a range of motion and strength as possible. Failure to achieve these goals invariably results in residual dysfunction in the tissues, setting the stage for recurring disability and pain.

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Foot and ankle problems in dancers

Lew C. Schon, M.D.

ABSTRACT: *Lower extremity problems, specifically in the feet and ankles, are common in dancers. This is not surprising considering the repetitive and acute stresses applied to lower limbs during this rigorous performing arts activity. When evaluating a dancer with lower extremity complaints, the nature of these demands must be appreciated. In addition to routine physical examination, static and dynamic biomechanical evaluation is paramount to analysis and treatment of leg, foot, and ankle conditions. Although a particular problem, such as painful bunion, may seem localized, it is often related to other factors, such as weak posterior tibial tendon, tight heel cords, or inadequate or forced turnout. It is incumbent on the physician to treat the specific area and, more importantly, to discover contributing factors that may be corrected by changes in technique or training. The physician caring for dancers should communicate with the instructor, physical therapist, or choreographer to facilitate the process. An overview of some common maladies and their characteristic findings are presented.*

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Toenail disorders

Toenail disorders, such as onycholysis, onychomycosis, subungual hematoma, ingrown nail, and paronychial infection, are seen frequently in dancers. Onycholysis is destruction and thinning of the nail from repetitive trauma to the nail plate. The nails become thin and flaky, and this can be quite painful. A simple solution is to protect toenails with lamb's wool or cotton and apply several coats of nail polish to strengthen them.

Onychomycosis is a fungal infection that causes a discolored and thickened nail. The condition may or may not be painful. Typically, we do not recommend an oral antimycotic due to its toxicity and the high rate of recurrence following its cessation. Drying agents or topical fungicides may have some success. The best treatment is trimming and occasional debridement of the nail for symptomatic relief. In ballet dancers, we do not recommend nail removal and matrix ablation as this may lead to a tender, exposed nail bed. Other dancers may respond to this treatment, depending on the demands of the toe's dorsum.

Subungual hematoma is bleeding under the nail from acute or repetitive trauma. The toenail appears normal, but there is a black discoloration of all or part of the subungual region. The condition may not be painful, but often an acute subungual hematoma that occurs from a direct injury is quite painful and may require drainage. Asymptomatic and chronic hematomas should be left alone. Melanoma may mimic subungual hematoma in appearance, so suspicious characteristics, such as changes in color, shape, or size, should be noted.

Ingrown nails result from irregularities of the edge of the nail or nail fold impinging the surrounding tissue. This local trauma causes inflammation and possible infection. Acute treatment involves removing the offending portion of the nail and administering antibiotics. Occasionally, the entire nail margin must be removed. For chronic or recurrent infections, the nail is "retrained" to grow beyond the flesh. This is accomplished by placing cotton wisps of collodion or benzoin under the nail's edge to prevent impingement. If this is not successful, removal of the nail and a portion of the matrix (the tissue responsible for nail growth) may be warranted.

Paronychial infection is an infection at the lateral nail fold and eponychium. The area is tender, red, and swollen. If the condition is detected before an abscess develops, oral antibiotics may be successful. If not, drainage of the abscess is necessary.[1]

Corns, callouses, and blisters

Corns and callouses are thickening of the keratin layer of skin from pressure between a bony prominence and external surface. Most often, corns occur over the joints of the toe's dorsum. Callouses are the thickening of skin on the plantar aspect under the metatarsal heads. Soft corns are areas of thickened skin between two toes. In soft corns, the hyperkeratotic skin becomes moist and macerated, sometimes leading to infection. Symptomatic corns and callouses may be padded with lamb's wool, foam, or a felt pad and shoes modified as needed. Sometimes, callouses or corns can be pared for symptomatic relief. Occasionally, an underlying bony prominence must be removed because of recurrent ulceration, infection, or unabating pain.

Blisters are the early response of unprotected skin to the sheer forces generated between the shoe, foot, and ground. Blisters are usually a problem at the beginning of a season. Once the skin thickens, blistering is rarely a problem. Treatment of symptomatic blisters includes wearing a second skin or moleskin. Vaseline (petroleum jelly) can also reduce friction. Usually, only appropriate observation for infection is needed.

Bunions

Bunions are caused by hallux valgus (a deviation of the big toe) with uncovering of the first metatarsal head. The bunion may be further accentuated by a bursa or sac of fluid between the bone and skin. However unsightly, a bunion is not a cause of concern based on specific loss of function or pain.[2] The overall alignment of leg, foot, ankle, and hips must be evaluated. Often, a dancer's overzealous attempt to achieve a nonphysiologic turnout is responsible. The foot may pronate in turnout—a condition known as "rolling in." Development of a bunion is a multifactorial phenomenon, including factors such as ligamentous laxity; genetic predisposition; tight heel cords; hypermobile, first metatarsal, cuneiform joint; inadequate external hip rotation; and pressure during toe shoe work or relevé. Treatment is directed toward underlying factors, relieving symptoms by padding and stretching shoes. Most dancers merely require reassurance and encouragement to continue dancing through some discomfort. Surgery to correct a bunion may end or limit a dancer's career and should only be recommended as a last alternative.[2,3]

Hallux rigidus

Hallux rigidus is a condition in which there is decreased mobility of the first metatarsophalangeal joint with pain usually at the extreme of dorsiflexion. Often, a bony prominence can be palpated on the dorsal aspect of the first metatarsal head or sometimes at the base of the proximal phalanx. When limitation is minimal, conservative modalities are useful. When range of motion is markedly compromised and demi-pointe or relevé becomes unbearable, a resection of the reactive periarticular bone may be warranted.[2,3]

Metatarsal stress fractures

Metatarsal stress fractures are extremely common in dancers and occur at the distal end, middle, or proximal[4,5] area of the metatarsus. The pain is activity-related, improves with rest, and may be associated with increased warmth and swelling of the foot. Relative rest with avoidance of specific offending activities is usually all that is needed if fractures are detected early. In longer-standing cases, greater restrictions may be necessary. A water barre and removable short-leg brace are necessary for resistent metatarsal stress fractures. Cross training prevents deconditioning during recovery.

Plantar fasciitis

Plantar fasciitis causes inferior medial heel pain. It occurs from overpull of the plantar fascia at the medial tubercle, where the fascia connects to the calcaneus. This condition may be associated with rolling in and pronation. It may also be associated with a tight Achilles tendon. The pain is worse in the morning, when rising to stand, and after sitting. The pain improves with rest. Although this condition is also called heel spur syndrome, relationship of the spur to the pain is not well substantiated. Many patients with heel spurs do not have pain, and many patients with pain do not have heel spurs. Approximately 16% of the population will have asymptomatic heel spurs.

Treatment is conservative and includes stretching exercises, walking, anti-inflammatories, heel cups, orthotic devices, and prudent use of injections. For cases in which treatment fails and suffering continues for about one year, surgery may be warranted.[6]

Tendinitis in the foot and ankle

Several tendons may produce symptoms in the dancer, including peroneal tendons, posterior tibial tendons, extensor hallucis longus tendons, and flexor hallucis longus tendons. Dull, aching pain is produced when specific tendons are stressed. Occasionally, a foot deformity may be secondary to diminished activity of the inflamed tendon. For example, an inflamed posterior tibial tendon may cause the foot to become more pronated. Occasionally, the inflammation is initiated by mechanical factors, such as subluxation or partially torn tendons. Hallux saltans, a triggering of the big toe, is caused by a thickened portion of the flexor hallucis longus tendon or muscle that impinges as it attempts to slide through its sheath behind the ankle joint.[3,7] Achilles tendinitis causes posterior ankle pain, which is aggravated with grand plié or plié. Swelling, inflammation, and tenderness occur along the Achilles tendon. Occasionally, a thickened area of tendon is noted.

Most tendinitis cases respond to anti-inflammatory medication, physical therapy, and relative rest. Occasionally, a brace and water barre are required. In recalcitrant cases, release of a stenosing tendon sheath or débridement of tenosynovitis may be indicated.

Impingement of the ankle

A dancer with posterior impingement of the ankle has pain behind the ankle when he or she points the foot or goes up on relevé, demi-pointe, or pointe. They will note difficulty fully pointing the foot. Posterior impingement may occur with a painful os trigonum, unstable ankle ligaments, or anatomic variations of talus shape. Os trigonum is an accessory ossicle off the posterior aspect of the talus. The bone lies lateral to the flexor hallucis longus tendon. The bone may be completely separated from the talus or joined by fibrous tissue or cartilage. Occasionally, a dancer has a large trigonal process connected with the talus, causing impingement.[7]

Patients with ankle instability can also develop an impingement. As the foot goes into demi-pointe, the talus plantarflexes and subluxes anteriorly from the mortise. The calcaneus and talus shift anteriorly and abut posteriorly on the tibia.

Treatment of these conditions is, for the most part, conservative with avoidance of the offending extreme positions. If these measures do not lead to remission, resection of the trigonal process or os trigonum is warranted. In patients with chronic ligamentous laxity, benefits of limiting motion by stabilizing ligaments to prevent impingement must be weighed against restricted motion and potential surgical complications.

Anterior ankle impingement may also occur in dancers. Symptoms are reproduced with plié. The dancer experiences pain in front of the ankle as the ankle dorsiflexes. Also, the heel comes off the ground earlier when performing a grand plié. Anterior impingement may be caused by anterior osteophyte on the talus. Occasionally, it occurs with impingement of the synovium or the anterior edge of the anterior tibiofibular ligament. It is important to distinguish these entities from a tight Achilles tendon. Treatment is symptomatic. In cases that fail to resolve, débridement of the osteophyte or resection of the inferior edge of the anterior tibiofibular ligament may be necessary.[3]

Leg pain

Leg pain in dancers may occur from a myriad of conditions, including stress fractures of the tibia or fibula, compartment syndrome, nerve entrapment (especially of the superficial and common peroneal nerves), pulled muscles, and radiculopathy from a herniated disc.[2] A common distressing problem in dancers is anterior tibial stress fracture. This stress fracture causes pain and swelling in the anterior part of the tibia. The pain is exacerbated by taking off and landing from a jump. Eventually, the pain progresses and becomes constant. If an x-ray shows anterior cortical hypertrophy and transverse lucency, a diagnosis of anterior tibial transverse stress fracture can be made. These fractures usually do not heal rapidly. Occasionally, a stress fracture goes on to catastrophic failure with complete tibial fracture. As this fracture carries a bad prognosis, several authors recommend early treatment with pulsed electromagnetic fields or surgery.[2]

Summary

In addition to common maladies that affect feet in the normal population, dancers are exposed to a higher frequency of overuse injuries. It is critical to recognize characteristic presentations of these problems and institute treatment in accordance with the dancer's desire to continue dancing. It is also essential to address static and dynamic forces contributing to an injury.

Although most consider dance an art, it must also be appreciated as a sport. These patients should be treated with the same intensity as a basketball player or tennis pro. Most importantly, physicians should assume the role of interpreter, communicating the medical perspective of problems to dances, instructors, and therapists. With this team approach, uneventful, speedy recovery is not just a midsummer night's dream.

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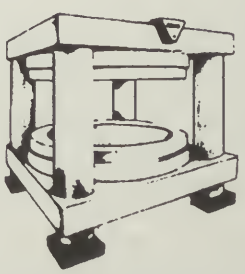
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Applied ergonomics: Adaptive equipment and instrument modification for musicians

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ABSTRACT: *Failure or difficulty in treating musicians' overuse injuries is often due to overlooking aggravating roles of activities of daily living. Numerous devices are available for people with limited or painful hand function to protect joints and minimize stress of daily activities. The occupational therapist can evaluate the patient and determine which adaptations are appropriate. Instruments may be modified to render them more ergonomic and less likely to cause injuries; this is especially true for wind instruments. Biomechanically and ergonomically correct seating can minimize back and neck strain. Orthotics, such as modified chin and shoulder rests for the violin, may minimize the stress and strain of holding an instrument. Just as there is a drive to make buildings and public transportation barrier-free to the physically disabled, musical instruments can be made barrier-free with adaptations like terminal devices for upper extremity prostheses. Principles of industrial and occupational medicine, especially regarding ergonomics and adaptive equipment, can be applied to the musical patient for treatment and prevention of injuries.*

Assistive devices for activities of daily living

During the acute phase of an overuse injury, daily activities are often significant aggravating factors. Failure or difficulty treating these injuries is often due to overlooking this. Numerous devices are available for people with limited painful hand function to protect joints and minimize stress of daily activities. The occupational therapist can evaluate the patient and determine which adaptations are appropriate.

For example, jar wrenches increase leverage, telephone holders or headsets avoid sustained grasp, key holders improve leverage and avoid pinch grip, and cylindrical foam sleeves are used with writing or eating utensils. These items are relatively inexpensive. Catalogs are provided free of charge by manufacturers.[1,2]

These devices should be used primarily during the acute phase of injury to minimize physical stress on the tissues. The patient should be weaned as soon as possible to prevent tissue fragility secondary to overprotection.[3]

Musical instrument modifications

Body shape. Guitars and, recently, violas have been designed with part of the instrument body recessed to permit easier access to the higher positions for the left hand. Resultant decreases in left wrist flexion help avoid the high pressures associated with carpal tunnel syndrome[4] and minimize friction of the flexor tendons against the transverse carpal ligament.

The bass fiddle should be selected with sloping shoulders if the musician is short in stature or does a lot of playing in the high positions (such as soloists). This minimizes impingement of the left forearm against the sharp edge of the instrument or thrusting the left shoulder forward when reaching down the neck.

To borrow a phrase from computer vocabulary, the flute is not the most user-friendly instrument. The neck is a common area of dysfunction due to the tilted and rotated head position. The length of the flute makes it necessary to rotate the head to the left to relieve strain in the left shoulder. Holding the flute parallel to the ground puts strain on the right shoulder as that muscle is fatigued by sustained contraction. Many players get around this problem by dropping the right elbow toward the body, which relaxes the right shoulder muscles. The downward angulation of the instrument usually results in tilting the head 30 to 40 degrees in addition to the rotation. Many teachers advise students to allow a slight head tilt and slight drop of the right elbow. This is about the best compromise under the circumstances.

Rotating and tilting the head are problematic. Wind instrumentalists would ideally like to play with throat and neck muscles relaxed. Rotating and tilting the head require neck muscle contraction. Maintaining this position several hours a day for years can lead to muscle strength and flexibility imbalance in the neck. This position also causes mechanical narrowing of the cervical foramina.[5] When compounded by spondylosis, it can lead to nerve impingement with symptoms ranging from neck and arm pain to cervical radiculitis. The neck is also vulnerable to muscle spasms of whiplash from automotive injuries, which may cause such discomfort upon rotation and tilting that flute playing becomes impossible.

A new design for the mouthpiece has been developed by forming a 30-degree bend just past the lip plate, allowing the head to remain in a near neutral position and the right shoulder to be relaxed.[6] This is not a new concept. Years ago, industry began making tool handles that were bent at an angle so that workers could avoid working with a bent wrist. The tone of the flute does not seem to be affected, but no formal testing has been done. The downside is a decrease in the stability of the instrument, which can be remediated with orthoses ("StediRests").[7]

Reduction of static loading. Static loading, which occurs when the weight of a tool is sustained and supported by the hand, is an etiologic factor in workers' injuries.[8] Industry addressed this by developing ways to suspend tools to remove the weight from the hand. This approach also works for musical instruments. An end pin on the cello relieves the player from supporting the instrument. End pins are also used for the English horn (bass oboe) and tuba, in which a modified end pin tipped with a ball rests on the chair between the thighs.

More recently, Fry developed a post for the clarinet that relieves common right thumb strain.[9] Freeing the right hand also opens the possibility of alternate fingerings, which may be more efficacious.

The oboe and soprano saxophone, being straight instruments, tend to be held away from the frontal plane of the body. At this angle, a neck strap is relatively ineffective in taking the load of the instrument off the right thumb. A tool, however, has been designed to bend the staple (the hollow metal tube that holds the oboe reed), allowing the instrument to be held more vertically.[10] Similarly, the soprano sax (Yamaha) is now available with an angled neck. The increased verticality allows more weight to be taken off the thumb by the neck strap.

The bassoon is commonly supported by a seat strap—a strip of leather attached to the end of the instrument and on which the player sits. This still leaves quite a bit of weight in the left hand due to the instrument's leftward inclination. This can be reduced or eliminated with a cantilevered end pin from the end of the instrument beneath the player's chair to a point on the floor directly under the instrument's center of gravity.

For the nonclassical guitarist in standing position, it may not be feasible to eliminate static loading. Weight of the guitar often leads to left trapezius problems at the contact point of the guitar strap. The strap should be wide and well-padded with closed cell foam to most effectively distribute the guitar's weight. A new design places the weight on the right shoulder with a waist strap as an option.[11]

Carrying the instrument and accessories can be a significant source of static loading, particularly on shoulder muscles. Adaptive equipment can minimize strain. Many cello cases have built-in wheels, and backpack-style cases are available for a variety of instruments.[12]

Key modification. Woodwind instruments are especially amenable to key modification. Location of flute keys can be customized to fit the player's hand, and the cluster of keys worked by the right little finger can be angled toward the finger,[13] reducing strain. Keys operated by the left fourth and fifth fingers can be lengthened to achieve a more neutral left wrist position.

Clarinet keys should be modified when the player lacks independent sublimis function. This condition, in which there are interconnections between the fourth and fifth flexor digitorum sublimis tendons, restricts certain fingerings on the clarinet. This problem is remediated by modifying the location of keys.[14]

Levers that operate French horn valves can be lengthened to provide greater leverage and widened to provide increased contact area. This is often accomplished by soldering dimes to the ends of the levers.

Seating

Like office workers, musicians often suffer from poorly designed seating. Biomechanically and ergonomically correct seating can minimize back and neck strain. As Dr. A.C. Mandal points out in his book *The Seated Man,*[15] the human body is poorly designed to sit with the hips and knees bent at a 90-degree angle. The chair seems to be derived from the ancient throne—designed for ruling, not working or playing musical instruments.

The International Conference of Symphony and Opera Mu-

sicians conducted a survey in 1986 regarding the incidence of musculoskeletal problems in instrumentalists.[16] The survey revealed the high incidence of lower and upper back pain. Another study reported in the *New York Times*[17] also indicated high incidence of back pain in instrumentalists.

Back pain in the sitting position has several causes: poorly designed chairs, deconditioned backs, inadequate body awareness, and physical/emotional tension. Excellent posture during solo practice may become distorted in the orchestra when musicians share a music stand and crane their neck to see the conductor.

The mechanics of sitting. According to Schoberth, when hips are flexed to 90 degrees, the femur (thigh bone) can only rotate 60 degrees in the hip socket. The remaining 30 degrees come from posterior rotation of the pelvis resulting in loss of the lumbar lordosis.[18] This places the torso's center of gravity approximately three inches behind the ischial tuberosity, creating a posterior torque on the back. This results in a sagittal C-curve to the entire spine. In order to sit erect and resist the torque, the back extensor, abdominal, and hip flexor muscles have to contract. Continual contraction of a muscle reduces its blood flow, resulting in the buildup of metabolites. When metabolites accumulate, they cause pain resulting in muscle spasm, and a vicious cycle ensues.[19] Flattening to the lumbar curve has other painful consequences, such as increased pressure on intervertebral discs[20,21] and stretched capsules of the facet joints.[22]

For wind instrumentalists, a further consideration is diaphragmatic function. The diaphragm arises from the lower aspect of the ribs and sternum and inserts on the upper lumbar vertebrae. Flattening in the lumbar spine results in flattening of the diaphragm, limiting its range of motion and thereby decreasing the airflow.

Use of a forward-sloping seat alleviates many of the problems arising from loss of the lumbar lordosis, such as strain on the back muscles and ligaments and diminished breathing capacity. If the seat slopes forward, the torso is brought directly over the ischial tuberosity, reducing the torque that forces the back into a C-curve and allowing an erect posture with minimal muscular effort.

The forward-sloping principle is seen in historical illustrations of seated workers from Egyptian times to 19th century Europe, but seems to be forgotten by designers of modern chairs until the relatively recent advent of kneeling chairs from Scandinavia. The chief disadvantages of kneeling chairs are discomfort in the knees (flexed to about 13 degrees), lack of easy portability (critical to musicians), and expense (even more critical to musicians).

Musicians who travel are often subjected to sitting on standard folding chairs. A practical solution is a lightweight, portable wedge cushion to temporarily modify the existing chair seat.[23] The back is placed in a position of comfort similar to that of the kneeling chairs, without knee discomfort. A dual-layer foam system provides comfort and firm support.

Even less expensive are alternatives such as a rolled towel at the rear of the seat or a two-by-four inch board under the back legs of the chair. While observing a recent, youth-symphony orchestra rehearsal, I noted that several wind and string players tipped the backward-sloping chairs onto the front legs to attain the forward-slopping effect.

Seat modification is only a battle in the war against back discomfort. A good strength and flexibility exercise program; frequent breaks to change position during practice; attention to body awareness by such means as yoga, and Alexander or Feldenkrais work; and relaxation techniques such as meditation, biofeedback, or stress management programs, can free the musician of the physical discomfort that often takes some joy out of playing.

Orthoses

Orthoses may minimize the stress and strain of holding an instrument and improve body-instrument interface or fit. Two examples will be discussed here. The posts, described earlier, to eliminate static loading are also considered types of orthoses.

The flute. Although left-hand problems outnumber right-hand problems in flutists, quite a few suffer strain and physical tension in the base of the right thumb and muscles pertaining to this area. One could argue that this most likely represents error in technique, with the player using excessive tension in the right hand or improper placement of the right thumb.[24] In this author's opinion, however, certain intrinsic balance problems with the instrument benefit from the enhanced stability attained with the use of orthoses or "rest." This is especially true when one uses the angled head flute.

The right thumb rest. There is great variation in the way the right thumb is positioned on the flute. Most commonly, the thumb is held underneath the flute and serves several functions. The first function of the right thumb is to support part of the flute's weight. The load is greater with the longer B-foot, or with gold or platinum flutes.

The second function of the right thumb is to provide opposition for the fingers as they press down on the keys. The harder the flutist presses, the more force there is transmitted to the base of the thumb.

The third function of the right thumb is to stabilize the flute while playing open-position (no fingers down) notes by squeezing the flute between the little finger and thumb of the right hand. The flute tends to be unstable in open positions because the mechanical rods on which the keys pivot are offset—that is, they fall outside the right thumb's base of support. When the fingers are lifted off the keys, the flute tends to roll in toward the player. This rolling is usually counteracted by slightly increasing the pressure between the flute and chin with the left hand while squeezing the flute between the thumb and little finger of the right hand, creating a source of muscular tension in the right hand.

Another source of discomfort arises from the small area of contact between the edge of the thumb and the rounded flute when the hand is held in the natural position—the ulnar side of the thumb facing the pad of the index finger. The thumb falls in this position when the hand is relaxed. This concentrates the flute's force over a small area of the thumb, which by its bony nature is not very pressure-tolerant. A common solution is to rotate the thumb upward (supinate) so the soft pad contacts the flute. This, however, is an unnatural position requiring mus-

cular force to achieve and maintain. Increased muscular tension in the thumb and hand may cause pain and injury and inhibit maximal dexterity.[25]

A product called "bo-pep thumb guide" corrects some of these mechanical problems, but not all. The bo-pep transforms the base of the flute from a convex surface to concave, conforming to the thumb's shape and increasing distribution of force over a wider surface area of the thumb. Even with the bo-pep, however, the weight of the mechanism rods still falls outside the thumb's base of support and the flute still tends to roll inward with open-fingered positions.

The StediRest uses a nonslip, cork-lined metal clip that grips the flute and has an adjustable, foam-padded metal extension customized to fit the thumb.[26] This serves two main purposes. First, it distributes pressure from the flute over a wider area of the thumb, allowing the thumb to be held comfortably in the natural position. Second, the weight of the rods now falls through the base of support, stabilizing the flute and preventing it from rolling inward.

The left index rest. Typically, the left index finger hyperextends at the knuckle joint, and the flute is supported on the ledge that is formed. In this position, nerve compression in the finger is quite common, resulting in numbness, "pins and needles," or pain. For the majority of flutists who lower the flute's end to relax the right shoulder, the flute must be pressed rather firmly against the lower lip to prevent the instrument from slipping. Interestingly, two common oral problems of flutists are loosening of the lower teeth and temporomandibular joint (TMJ) pain.[27] Both problems are likely related to the amount of pressure against the lower lip and teeth. Again, the bo-pep increases comfort by changing the rounded surface of the flute to better fit the finger, but does little to stabilize the instrument.

The StediRest for the left hand uses a foam-padded hook that curls around the base of the left index finger, yielding comfort and enhanced stability without increased pressure or muscular effort. The flute can be completely supported and stabilized from underneath without using any fingers on top or excessive pressure inward against the jaw. This aids injury prevention and enhances technique as the hands are more relaxed, allowing greater finger dexterity.

The violin. The violin's roots are in Renaissance times, when, as the vielle, it was held vertically in front on the thighs and bowed like a little cello. In modern form, it is held between the left shoulder and mandible with various ways to accomplish this. Distorted and nonphysiological postures are common, such as "hiking" of the left shoulder and leftward tilting and rotating of the head. This posture, and ill-fitting chin and shoulder rests, often lead to a variety of maladies such as trapezius muscle spasm, cervical muscle strain, radiculitis from foraminal impingement, TMJ problems, and acneiform skin lesions where the chin rest contacts the skin ("Fiddlers' neck").[28] Many of these problems can be remedied by adjusting or custom molding the chin and shoulder interfaces.

The principal reason for excessive elevation of the left shoulder and tilting of the head is the fact that the chin and shoulder rests fail to adequately fill the space between the angle of the jaw and the left shoulder. This is similar to holding the telephone receiver while writing. The solution is to raise the chin rest with cork shims or to have the violin shop make a raised one. Raising the shoulder rest would lift the entire fiddle up and force an increase in the abduction of the bowing arm, risking rotator cuff impingement.

Although numerous styles of chin and shoulder rests are on the market, players often complain of being unable to find one that feels just right. This is not surprising given enormous variations in human anatomy. Shoulder and chin rests may be individually fitted by a certified prosthetist and orthotist (CPO), using the same impression and casting techniques for orthotics and prosthetics. Custom molding the shoulder rest enhances the sense of security in holding the instrument by improving the contact area. Less clenching of the instrument is required. Customizing the chin rest can afford a better head position and distribute force equally over the entire contact area, avoiding skin and TMJ disorders.

Adaptive equipment for the physically disabled

Just as there is a drive to make buildings and public transportation barrier-free to the physically disabled, musical instruments can be made barrier-free with certain modifications and adaptations.

French horns, normally played with the left hand, can be built "backward" to accommodate left upper extremity amputees. Prosthetic terminal devices allow holding the trombone and drumsticks, and metal picks affixed to the ends of prostheses allow guitar playing.

For quadriplegics, sip-and-puff controls can be adapted to a computer and used in conjunction with musical software packages for composition and playback.

Summary

Applying principles of industrial and occupational medicine, especially regarding ergonomics and adaptive equipment, benefits the musical patient in treatment and injury prevention.

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The treatment of overuse injury syndrome

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ABSTRACT: *The emphasis on performance injury has shifted from epidemiology to prevention. Rest treatment, modified or radical, followed by rehabilitation, remains the cornerstone of treatment. The basic features, details of management, and side effects of these treatment phases are discussed at length, followed by a detailed description of the author's experience with 176 musicians seen for overuse injury syndrome. Forty-one patients were not prescribed rest treatment, refused rest treatment, or quit rest treatment early; 45 patients were prescribed a modified rest treatment program, of whom 87% were cured of symptoms; and 90 patients were prescribed radical rest treatment, with a final success rate of 87% also.*

Overuse injury syndrome or performance injury in musicians is documented in many published studies.[1–8] Emphasis has shifted from epidemiology to prevention. Since overuse prevention lies in control of use, a common sense medical point of view provides most answers to preventing this debilitating condition among instrumental musicians. It is particularly sad to see this condition in children, indicating that even simple messages of prevention may not be being taken seriously.[6–8]

Little has been written recently about treating this disorder, especially the *results* of treatment. By contrast, emphasis in 19th-century literature was on rest from causal and aggravating activities, and recoveries were reported from that management.[9,10] Many writers, such as Waller[11] and Poore,[12] stressed that the earlier this was undertaken the better.

Turning to the late 20th century, however, there are two distinct manifestations of overuse in instrumental musicians—**painless focal dystonia** and **painful musculoligamentous overuse**. Focal dystonia is the painless condition of loss of coordination and the presence of involuntary movements. Treatment results reported for this condition are largely unfavorable,[13,14] although Hallett et al reported some improvement with botulinum toxin.[15] Prolonged rest, biofeedback, psychotherapy, steroid injections, and operations have no significant effect.

Painful musculoligamentous overuse is much more common and is characterized by pain and loss of function in muscle groups and ligaments subjected to excessive or unaccustomed use. It carries a better prognosis

even when technique has been affected. Perhaps the only recent publications dealing with cure of symptoms rather than improvement are those of Fry[16] and Smythies,[17] although overuse syndrome in this latter study was not music-related. Virtually all reports recommend a period of rest.[18] Results, however, are generally expressed in degrees of improvement. If one accepts that improvement or cure of symptoms results from rest as described in modern and 19th-century reports, rest still remains "the cornerstone of treatment."[18]

I am unaware of any reports of worthwhile improvement from anti-inflammatory drugs, acupuncture, surgical operations, physical therapy, or psychotherapy. Predictably, exercising overused painful muscles and ligaments usually worsens symptoms.[19,20]

The purpose of this paper is to define "rest" and to detail treatment of painful musculoligamentous overuse with a program of pain avoidance, which under my direction has produced cure of symptoms and return to pain-free music performance.[16]

Rest treatment: Phase 1

Definition of rest. "Rest," in this context, means resting from all pain-causing or pain-aggravating activities. It is important, however, that muscles, ligaments, and joints function as normally as possible in other respects.

General principle underlying rest treatment. The principle behind rest treatment is to lower the activity level to a degree that structures tolerate, without causing pain or aggravating existing pain.

Contraindications in treatment. Contraindications in rest treatment are as follows: (1) Splintage is strictly forbidden, unless for occasional or temporary means to get better sleep. If splintage is employed, stiffness in joints is certain, muscle wasting may become exaggerated, and the range of motion in joints may not be fully recoverable. (2) Use of any drugs that modify pain may confuse monitoring of the pain level, causing inaccurate assessment of progress.

There are two types of rest treatment: modified and radical.

Modified rest treatment. In less severe examples, pain avoidance may be achieved by modified rest, still allowing some use of the instrument. Treatment continues until the patient becomes pain-free or improvement ceases. This often takes four weeks to four months. Time and intensity of playing must be reduced to the degree that pain is no longer produced. The painful thumb of the clarinetist is relieved of static loading by a clarinet post. Aching shoulders and neck may respond to body control and awareness modes, such as Feldenkrais, Alexander, yoga, or physical therapy, perhaps with a review of the musician's physical activity so certain sporting activities may be deemed appropriate. Sometimes modified rest is tried before resorting to radical rest.

Problems of technique are generally reviewed in detail before referral of a musician to a physician. In the best interdisciplinary management, however, there is discussion between the physician and music adviser. Works requiring great hand stretches, such as Chopin etudes, may not be suitable for some, and revision of repertoire is sometimes all that is necessary. This still falls within the theoretical framework of "rest from pain-causing activities." Trying to play a difficult work up to speed before movements are fluent, particularly for girls between 12 and 16, may cause overuse. This exemplifies the importance of interdisciplinary assessment and management.

Radical rest treatment. Basic features. In more severe examples of painful overuse, pain avoidance cannot be absolute, but the aim is to get as close as possible to that ideal. The musician must cease playing, and use of the affected hands has to be modified radically. This continues until the patient is pain-free or ceases to improve. This usually takes 6 to 12 months.

It is the musician's choice to accept or reject treatment. The rest program is prolonged, but in the 19th and 20th centuries it is the only treatment that has brought success to musicians, as judged by published articles. It is tiresome and tedious for all. Any alternative would certainly be preferable—if only the disorder could be cured by surgical operation, drugs, acupuncture, or psychotherapy. Many patients with overuse syndrome have tried some or all of these treatments without success.

During rest treatment, severe problems of lifestyle and interpersonal relationships must be accommodated. Although hands must be kept moving as normally as possible, tasks such as cleaning teeth, tying shoelaces, doing buttons, opening faucets, or using eating utensils may cause pain. Success often depends on an innovative streak to find ways around difficulties, as well as organizing help from others.

The patient must be seen every week to monitor progress and give psychological support. Progress is measured by the intensity and duration of pain noted on the "best day" of the preceding week. As time goes on, there is more pain-free time on the best day and intensity falls. A patient usually compares intensity of pain on the best day of the current week with that of the week before. Most patients, even though they have been forewarned, become upset about "bad days," particularly when they follow a good day. Fluctuations are normal during recovery.

It is mandatory to explain to the patient before going on the rest program that in the first three weeks, pain increases, becomes sharper in quality, and comes from new areas nearby. Even when patients are warned, they may become alarmed. Constant reassurance is necessary. This warning can be totally forgotten, and reminders may be required. It is important to explain to the musician why splintage and particular drugs are contraindicated. It might at first seem heartless to forbid analgesics when pain is present. The minor to modest degree of pain relief, however, must be set against scrambling the monitoring process. It is vital that pain level and the pattern of fluctuation are reported as accurately as possible to the physician.

All of this time the musician is not playing the instrument, and the feeling of loss is very real. The sense of dependency on others may be irksome. The only thing that sustains patients is the progress being made. This is the best psychotherapy. Putting a patient in contact with another patient in a more advanced stage of recovery is often helpful, as is the opportunity to speak to a musician who is pain-free and doing hand rehabilitation exercises (see below). Getting the patient to a successful end point is the first of two very difficult stages in treatment.

Details of management. All day-to-day activities have to be planned. Taps are turned on and off with elbows using special fittings or a long-handled lever. Doors are opened and closed with the foot. Food is cut by others and eaten with one plastic implement. An electric toothbrush must be used and held with both hands. A hairstyle to make hair grooming easy is adopted. A blow-dryer can be mounted in a stand rather than handheld. Clothes should not have to be pulled on and off forcefully; slip-on shoes and track suits are suitable. To turn the key in a lock, the key should be gently put in the lock and then turned around with a long piece of wood with a slit in the end; this slips over the key for leverage. These are a few examples of the adaptations needed to avoid pain.

A single episode of noncompliance may wipe out weeks of progress. There is little margin for error. Even allowing for fluctuation, unexpected episodes of pain must be traced to the physical activities that caused them. A learning curve should be as steep as possible in this regard.

Commitment to radical rest treatment. It is most necessary to explain to the musician the full extent of inconvenience brought about by rest treatment. Some musicians are not prepared to commit to this program and will reject this treatment when it is suggested to them. They often say they are prepared to play in pain and will takes measures to control it, such as avoiding other pain-causing activities and taking analgesics before performance or practice. Some may not have the emotional or physical resources to endure the long period of time on the rest program. If they are freelancers not covered by insurance, they believe they cannot stop. Recent evidence indicates that playing with pain may be associated with risk, as there appears to be a connection between length of symptoms and loss of coordination leading to impairment of technique.[21] This must be made known to the patient.

Some patients who commit themselves to treatment find it is too difficult to continue. They take themselves off the program and fail by default. With close monitoring, noncompliance usually shows up quickly. These patients often freely admit they were unable to comply with the demands. This is mostly due to difficulties in organizing activities, lack of help, feelings of depression, and loss of drive.

Musicians who stay with the program show a remarkably high success rate—in excess of 80% even in severe and advanced examples. As pain fades, they must not start doing more with their hands, as this will risk a setback. It is rewarding to see patients brought to a pain-free state, and it is a tragedy to see others who do not have the physical or mental resources to stay with the program. Prior to treatment, it is useful to have a video record of the "five finger" test for loss of coordination.[22] A standard test on a keyboard and computer records loss of control more scientifically.

Side effects. Psychological strain from the program can only be justified, accommodated, and balanced by obvious progress. The physician has to be infinitely patient. In recovery, musicians often have odd sensations in the arms, flickering muscles, circulatory changes, or strange feelings on the skin, which may be alarming. These sensations occur in most patients and are quite benign.

Many musicians express concern that their muscles will wither. As long as normal movements are maintained, diminution in muscle bulk is usually not great. Once patients become pain-free, or nearly pain-free, they often gain a perception of greater muscle strength, although they never put this to the test. During rehabilitation, muscles certainly become stronger and more effective. Late follow-up indicates no lasting problems in this regard.

Joint stiffness is an occasional problem. Two of about 280 of my patients suffered bilateral frozen shoulders. Both recovered completely. Stiffness in the wrist and finger joints may occur if the disorder is accompanied by a reflex sympathetic dystrophy, which can be quite severe. In these uncommon examples, the joints may not recover all movement, but they generally do. Such patients take longer to get to a pain-free state and have more setbacks in rehabilitation. Skin may become glossy, particularly on the back of the hands, and lose texture. I treated three such patients, one moderately severe. Many patients show minor autonomic disturbances.

When the patient is totally pain-free for three weeks, the rehabilitation phase begins.

Rehabilitation: Phase 2

Basic features. Getting to a pain-free state is tedious and difficult for patient and physician. Getting the musician back to performing pain-free with sustainable practice habits is more difficult still.

It is a mistake to think the battle is won when the patient becomes pain-free; nothing could be further from the truth. Setbacks are the rule rather than the exception, creating frustration for patient and physician. Management of the rehabilitation phase is time-consuming, requiring weekly monitoring.

Muscles, ligaments, and joints have been lightly loaded for some months. Strength and endurance should not be relied on. Early exercises must be within almost ridiculous safety bounds and advance at an equally safe rate. A common mistake is advancing too quickly or beginning rehabilitation before all pain is gone. In either instance, failure is almost certain.

Details of management. The newly pain-free patient begins with a five-finger exercise on the desktop, starting with five seconds each hand twice a day. If there is no adverse reaction, five seconds is added to each exercise so that after about two weeks, the exercise will be just over one minute. There must be retreat at any sign of pain or major discomfort, resuming for a shorter time and working up again. Another segment is then added in the middle of the day, adding five seconds each day until it catches up with the other segments. Then all segments are advanced at the same rate to about five minutes per day.

At this stage, the hands are transferred to a piano, keyboard, or terminal. Over the course of two weeks, a five-finger exercise on the piano is gradually substituted minute by minute for the desktop. Exercises must be completed by the clock, and any sign of pain or major discomfort brings about immediate cessation of exercises. When pain stops, exercises are resumed

for a lesser time and gradually increased daily as before. During this time, in all other respects, the patient must behave as if still on the program, avoiding all other activities that might cause pain. This rate of advance is about average.

When the patient reaches five minutes three times a day of five-finger exercise, a fourth segment is added. When this catches up, the exercise is gradually increased to 10 minutes four times a day, at which times a fifth segment is added until this one catches up. If the patient has not had a setback for a time, he or she graduates to a C major scale in addition to the five-finger exercises. At this stage, a 10 second per day increase may be possible if there are no recent setbacks and all is going well. The next step is usually other scales and diminished-seventh arpeggios. When there is 15-minute activity five times a day and no recent setbacks, triad arpeggios are added with other scales and some sight reading. No matter what the patient's instrument, I have found rehabilitation on the piano the best way for gradual resumption of use of the hands. Only when the patient is managing some arpeggios, can there be some relaxation of day-to-day hand use. At this time, it is useful to try the five-finger test or the computer-generated test to assess recovery of coordination.

Setbacks are usual, and from time to time one must cease exercises until major discomfort or pain disappears. This requires patience. During the early stages of playing scales and arpeggios, it usually becomes obvious, particularly with pianists, that loss of coordination has largely or completely disappeared. Some pianists note months later that they not only regain previous technique but may have an extra measure of control.

When reaching 15-minute activity five times a day on the piano or other keyboard, violinists, clarinetists, and others can start on their own instruments again, sometimes earlier. It is essential for oboists and clarinetists to never again take the instrument's weight on the thumb, or recurrence of the disorder is virtually guaranteed.[23,24] Each instrument has its own problems in the rehabilitation phase. I revised my earlier opinion that left-handed lesions in guitarists have considerably worse prognosis than others. Since I wrote my treatment paper, four successive guitarists became pain-free on rest treatment, resuming performance at music school.

Rehabilitation may take up to six months, but many individuals are functional in half this time; it cannot be rushed. Sports medicine practitioners knew a long time ago that muscle groups can only increase performance 5% to 10% a week.[25–27] Webber wrote, "With respect to running sports, the '10% per week' rule for increasing training intensity and duration is now widely accepted amongst amateur runners, and it must particularly be followed in training the young runner."[25] O'Neill and Micheli, commenting on overuse injuries in young athletes, advise gradual and cautious acquisition of muscle group performance.[26] Kiefhaber and Stern also recommend the 10% rule.[27] After months of low activity of musicians' overused muscle groups, this should be an absolute outside limit. Probably an arbitrary figure of 5% gain is safer.

It is important to ensure there is a steady, slow grading of difficulty and that practice segments for at least six months do not exceed 20 minutes with at least that much rest between segments. Even in the long term, practice segments should never be longer than one half hour, and difficult and easy segments should be alternated. As the musician gradually does more with the instrument, it is possible to do more everyday tasks requiring use of the hands. These, however, should be increased with caution and sensitivity.

Decisions and alternatives. Because the two stages of rest treatment may take up to 18 months, is this really practical or worthwhile? It is for some because the success rate is high. Many orchestra musicians have had overuse symptoms for up to 30 years.[26] Eighteen months compared with a lifetime of playing does not seem too awesome when placed against these figures. Sometimes it takes less than a year. The alternative may include a progressive increase in symptoms with some degree of muscle failure and a gradual impairment of technique. Rest treatment might be looked at as the "best of a bad lot" of alternatives.

Other viewpoints on treatment urge continuation of playing. Some pedagogues hold that this is entirely a matter of technique, and the appropriate treatment is to keep on playing but to convert to the "right way." This viewpoint fails to explain occurrence of the syndrome across the ability spectrum from music school students to some of the most famous players of the century with state-of-the-art techniques. Another viewpoint is that pain is necessary to play properly. Two pernicious adages are modified to be more medically correct

- No pain, no gain = no brain. (Courtesy of Dr. Thomas Mastroianni)
- Practice 'til it hurts, so I can beat your grades.

Results of rest treatment: Personal series

Explanation of table. The **Table** summarizes my amended results from modified and radical rest (pain avoidance) programs as detailed in the *Journal of the Royal Society of Medicine* in 1988.[16] The results are amended because outcomes can now be reported on those whose treatment was in progress at the time. When they were initially reported, the percentage of success could not be definitely stated because of patients "in the pipeline." The number in this series was actually 176, as a fifth viola player was accidentally left out of the total. In the original publication, I attempted to provide individual detail about patients, although two untreated miscellaneous patients were not described. The article gave all the basic information, but avoided analysis that categorized the 22 pipeline patients as failures because they were not yet cured of symptoms, excluded them altogether, or made some estimate of outcome. Because their outcomes are now known, an appropriate final analysis is possible. Though the **Table** appears to be somewhat complex, a few words of explanation will simplify this.

Columns 1 and 2 show instrument distributions in these musicians. Column 3 indicates the distribution of the 41 patients who did not have rest treatment. This is made up of two subgroups. The first group (30 patients) did not start the rest treatment, gave up the instrument, or transferred to another instrument. The second group (11 patients) quit early, although they initially accepted advice to go on the rest program.

These musicians decided within a few weeks, at most, that they were unable to meet the demands of the pain avoidance program or decided to keep playing and tolerate the pain. In any event, these musicians were well short of an end point when quitting the program.

Column 4 shows the distribution and fate of 45 patients treated with the modified rest program; 39 became pain-free and resumed performance—an 87% success rate.

Column 7 shows the 22 pipeline patients described in the initial series. Those who eventually became pain-free and returned to performance are identified by an asterisk. The final success rate is 87%—exactly the results in the less severely affected patients.

Columns 5, 6, and 7 show retrospective results of the 90 patients on the radical rest program before the end results were known . Column 5 shows the success rate counting the pipeline patients as failures. Using this rather harsh criterion, the success rate is 69%. Column 6 excludes the pipeline patients from analysis, making the success rate 91%.

Recurrence, reinjury, and career progression. Follow-up time in this series varies from 5.5 to 9 years. In general, there was only one major music-related reinjury and six minor re-injuries, which were not music-related. These episodes were due to trauma to the upper limb, where some pain was present that was aggravated by playing the instrument. The patients were treated with rest from the instrument and all other pain-aggravating activities until the pain went away. This took two to five weeks. Another nine patients reduced musical performance. These episodes were unrelated to recurrence of symptoms, but were associated with changes of lifestyle such as marriage, childbearing, leaving school, or intercurrent illnesses. A few patients indicated that they could almost instinctively feel their threshold of re-injury. Although they played pain-free at previous standards, at times they felt within a half a dozen notes of the disorder coming back. Two musicians returned to the orchestra only a short time before retiring, but remained pain-free.

The major re-injury occurred in a principal clarinet player who was pain-free and performing in top form for five years after being cured of symptoms. After a vacation, instead of easing in, she rehearsed and practiced the first clarinet part of Strauss' *Electra* for excessively long periods without breaks. She noticed a falloff in extension of the right ring finger. She continued intensive playing and practicing, and the problem worsened. I advised urgent rest from the instrument, to no avail. The five-finger coordination test demonstrated her loss of control mainly in the ring finger. She is now under care of a practitioner who apparently told her the problem is due to her arms being too long for her body, suggesting she play without her clarinet post and load the clarinet fully on the right thumb. She has resumed a lesser position in the orchestra. Her ring finger problem remains and appears to be stabilized. She still manages to play a standard repertoire.

Two teenage trumpet players who recovered after loss of embouchure kept playing, but remained cautious about their

Table. Results from modified and radical rest programs as reported in 1988

					Patients accepting rest treatment as prescribed			
1	2	3			4	5	6	7
Instrument	Total	Patients not treated by rest, refusing rest treatment, or quitting early			Modified rest management resulting in cured symptoms	Radical rest treatment, n=90		
						Cured symptoms		Treatment still in progress* (pipeline patients, n=22) with update
		Total	Never started	Early Quit		Including 22 pipeline patients	Excluding 22 pipeline patients	
Piano	44	14	6	8	6/7	16/23	16/17	6 improving satisfactorily*
Clarinet	28	8	6	2	5/6	11/14	11/13	1 improving satisfactorily*
Flute	11	1	1	-	2/2	6/8	6/7	1 pain-free*
Oboe	5	1	1	-	4/4	-	-	-
Bassoon	1	-	-	-	-	1/1	1/1	-
Saxophone	7	1		1	2/2	3/4	3/3	1 improving satisfactorily*
Trumpet	7	4	4		1/1	2/2	2/2	-
Trombone	2	-	-		1/1	0/1	0/1	
French horn	2	1	1		-	1/1	1/1	-
Tuba	1	1	1		-	-	-	-
Violin	22	4	4		4/5	8/13	8/10	3 improving satisfactorily*
Viola	5	-	-		4/4	1/1	1/1	-
Cello	6	1	1		1/2	2/3	2/2	1 improving
Bass	3	-	-		1/2	1/1	1/1	
Guitar	17	3	3		5/5	4/9	4/4	4 pain-free,* 1 improving
Percussion	8	-	-		3/3	4/5	4/4	1 improving
Miscellaneous	7	2	2		0/1	1/4	1/1	3 improved but not cured at finalization
	176	41	30	11	39/45 =87%	62/90 =69%	62/68 =91%	*Patients (16) now playing pain-free **Final success rate is 78/90 = 87%**

routines. Two clarinet players and one trombonist who lost embouchure did not recover and did not play again.

Of the patients having rest treatment who were classified as improved rather than cured of symptoms, all stated they derived some benefit in terms of pain level and ability to keep playing.

Discussion. These results accord well with 19th-century reports, showing the musician with painful musculoligamentous overuse committed to this difficult regime has an 80% plus possibility of cure of symptoms and return to pain-free music performance with sustainable practice habits. Practice habits have to be modified considerably, spread over the day in 20- to 30-minute segments—no more. Practice has to be planned and calculated.

Despite published detail in the 1988 treatment paper, outcome of those on rest treatment was misinterpreted by Bengston and Schutt,[29] who believed all patients in the series had rest treatment.[30] This led to their fallacious calculation of a 55% cure of symptoms. Accuracy of reported results must be beyond doubt as this has implications for decisions about treatment. Many musicians would likely put up with this disruptive program for an 87% probability of cure. They are much less likely to do so for a 50/50 chance.

The recurrence or re-injury rate from musical activity is very low. This can be attributed to training in the rest and rehabilitation phases, when patients were sensitized to pain-free physical capacities. Apparent awareness of a pain threshold is revealing.

Many patients seen outside this series improved with a limited period of rest, but were not pain-free. Recurrence was the rule rather than the exception when performance was resumed—particularly in orchestra players. I have seen situations in which patients became pain-free from rest but without a controlled rehabilitation phase. Here, the recurrence rate also tends to be high as muscles and ligaments cannot increase performance in terms of strength and endurance in such a fashion. Loss of embouchure in clarinetists, trombonists, and French horn players appears to have poor prognosis.

Conclusion

Rest treatment—applied judiciously—gives musicians an excellent chance of cure of overuse symptoms and restoration of pain-free playing. Is it worth the sustained effort over months, with little margin for error? Is it better to put up with the pain and retain a normal lifestyle? What about longevity of the playing career? Is the trade-off between short-term sacrifice and long-term survival worthwhile? Will insurance finance such prolonged treatment?

Affected musicians must answer these questions for their own situations after balancing pros and cons. The decision is not always easy.

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Addressing stress-related illness in professional musicians

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Abstract: *The health profession has become increasingly aware of the frequent incidence of work-related injuries and illnesses occurring among professional musicians. Although all workers run risks of stress-related health problems, performers must work under especially stressful conditions. Musicians must perform before the public; they must perform under the constant critical scrutiny of conductors; and they are expected to perform perfectly. Stressors, some unique to the music profession, some shared with other working populations, can come from the environment in which musicians must work, from psychological pressures, and from factors intrinsic to a performing career. In response to the increasing incidence and awareness of the health problems of professional musicians, music medicine, a new medical specialty, has come into being. Physicians who treat performers can act as resources to educate their patients about work-related stress and to refer them to appropriate mental health professionals. They can be instrumental in helping musician patients return to performing careers with a new ability to handle work-related injuries and stress.*

The new medical specialty—music medicine—has emerged in response to the growing awareness among health professionals of the alarming increase in the amount and severity of professional musicians' work-related injuries and illness. Symphony and opera musicians have a high incidence of occupationally caused pain, exceeding even most factory workers.

In a 1985 survey of major orchestras, 76% of those responding reported enough pain to seriously affect their performance.[1] One study reported that professional musicians die 20%–22% sooner than their counterparts in the general population, and that coronary heart disease accounts for almost 5% more deaths among musicians than in the general population.[2] Studies of popular musicians are lacking, but in all likelihood they may run even higher risks with their more uncertain economics and frequent touring that create whole new sets of stressors.

Those embarking on careers as performing musicians are sustained not only by their ambitions and talent, but also by their hopes and expectations for rich and fulfilling creative lives. Only gradually do many come to realize that achievement of their artistic and professional goals may cost

them their physical and psychological health. Substantial evidence shows that this is true for growing numbers of performers. Work-related injuries, illness, and psychological problems have reached epidemic levels among musicians.

Sources of musician stress

Since everyone who works must cope with both the stress of everyday life and stress in the workplace, what makes musicians a population at special risk for stress-related illness and injuries? Three factors present in the lives of musicians produce a total stress quotient far higher than might result from any one factor taken alone. Together, with the other common, everyday stressors, they create a situation with potential for overwhelming stress unique to the music profession.

First, musicians perform before the public, facing all the terrors associated with stage fright. Second, they work under the constant scrutiny of conductors both in rehearsal and in concerts, making them subject to criticism at all times, even during public performances. Third, musicians are expected to deliver perfection—note-perfect performances every time, everywhere, and under all circumstances. By contrast, professional athletes playing before the public enjoy a more generous tolerance for error. A major league ballplayer with a .300 batting average may be a star; however, no audience would tolerate a musician who missed 7 out of every 10 notes. Probably no other profession involves the combination of these particular stress factors.

Other challenges face particular groups of performers. Jazz musicians, improvising four to six hours every night, must be endlessly creative. Club date musicians, especially single-engagement players, go to jobs rarely knowing with whom they will be working or even what they may be asked to play. Even minor slips may cause them never to work again for that hiring agent. Older players notice uneasily the changing musical styles with which they are not familiar, and they feel less able to compete with younger players. Studio recording musicians are expected to get it right on the first take; studio time costs money.

The elements of stress for professional musicians lend themselves to classification into three categories: environmental hazards, psychological pressures, and intrinsic factors. These categories extend beyond the sources of stress common to us all in everyday life because music, an overcrowded profession, can be viciously competitive and highly insecure.

Environmental hazards include all workplace issues that negatively influence a musician's productivity and well-being. Psychological pressures refer to both intrapersonal and interpersonal issues. Intrapersonal issues deal with one's ability to regulate, question, or react to self-directed messages, internalized values and attitudes, and how one mediates critical messages and maintains confidence and self-esteem; interpersonal issues involve transactions with conductors, managers, and the public. Finally, intrinsic factors are stressors unique to a performer's life and inherent in a performing career.

Environmental hazards

Any systematic survey of musicians' working conditions reveals an extraordinary number of stressors. Psychologist Robert Holt documented nearly 60 types of workplace hazards and stressors and more than 55 types of dysfunctional stress reactions using data drawn from a bibliography of nearly 200 studies on workplace stress.[3] Musicians routinely suffer exposure to virtually all the hazards enumerated by Holt. Four notorious stress contributors that affect musicians include shift work, changes in workplace locations, changes in supervision, and economic insecurity.

Working hours for professional musicians bear no resemblance to the nine-to-five regularity and predictability that many workers in other fields enjoy. Rehearsals and concerts take place mornings, afternoons, and evenings. Schedules change from week to week. Tour schedules are grueling and disruptive, especially for those attempting to maintain a family life.

Frequent changes and poor conditions in a musician's work setting also provide a source of stress. Freelance musicians may rehearse, play, and record in three or four different locations in a single day. This typifies their work, week in and week out, throughout their careers.

Musicians must constantly adjust to changes in leadership. Symphony musicians face new conductors every week during the orchestra season; opera house orchestra players have new conductors every evening. Each conductor presents a different personality and musical style, and makes different demands. Freelance classical, popular, and commercial musicians rarely know who will direct them from one day to the next.

Financial insecurity, a fact of life for most musicians, imposes tremendous stress and emotional costs. In this respect, the music profession has changed very little for many musicians, even for great masters, over the course of history. Mozart struggled for financial survival in Vienna amidst all sorts of intrigues by other composers. J.S. Bach, in addition to his duties as organist, composer, and choir director at St. Thomas Church in Leipzig, taught Latin classes to justify to the church fathers the modest salary he received. For every famous musician who struggles with poverty, surely hundreds of the less famous have also struggled to survive economically.

Physical risks. Beyond these four major stressors, the daily lives of working musicians include many others. Performing is hard physical work, especially for brass players. Davis, telemetering electrocardiograms of musicians in performance, has documented arrhythmias and tachycardias in brass players and Valsalva-like responses, and has observed conductors maintain an average increase in heart rate of 89% during performances.[4]

Inadequate rehearsal breaks predispose players to overuse and repetitive-motion injuries, especially for players of stringed instruments. A marked increase in musculoskeletal injuries, including carpal tunnel syndrome and focal dystonia, has resulted.

Concert halls may be overheated, chilly, or drafty, affecting muscles and destabilizing the tuning of instruments. Chairs may be poorly designed. Lights may shine too brightly in television productions or be too dim in theater pits. Backstage areas are often unsightly, cramped, and unsafe.

The stage itself may pose hazards. On a 1990 Pittsburgh Symphony tour of the Far East, a cellist, walking onstage,

stepped on a black cloth spread across an unrepaired gaping hole. He fell 18 feet to the cellar floor below. He escaped with minor injuries, but the fall totally ruined his valuable Italian instrument. Such an event traumatizes the entire orchestra, whose members must collect themselves and present a concert to an expectant audience. The old adage, "the show must go on," exacts high costs in terms of stress.

Musicians, like athletes, are constantly vulnerable to physical injuries. Athletes, especially football players, refer to "the moment"—an injury that can occur at any time and bench a player for weeks, for a season, or for life. This is no less true for musicians. With a sprained finger, a bruised lip, or a sore throat, most working people (including well-compensated athletes) can do a day's work; a violinist, a trumpet player, or a soprano cannot. By the nature of their work, musicians cannot do anything other than the single jobs for which they trained. Any number of physical or psychological problems can derail careers. For example, the career of Leon Fleischer, a concert pianist of international reputation, came to an end when medical techniques of the time could not alleviate muscle cramps in his right hand.

Musicians risk hearing loss and tinnitus. Performers in front of the brass and percussion sections run the greatest risk. A member of the Chicago Symphony told of experiencing temporary deafness in one ear after sitting directly in front of the bass trombonist for a long Berlioz work. The Chicago Symphony management considers this hazard serious enough to supply acoustic ear plugs to any orchestra members who request them. Many orchestras have experimented with chair designs incorporating acoustical protection. Overexposure to high volume amplification systems have made many rock musicians either partially or totally hearing disabled. Peter Townsend, a member of the rock group The Who, has for many years limited his onstage appearances to 10-minute intervals, a result of hearing injuries.

Poor labor–management relations. Employment conditions for most musicians were uniformly deplorable well into the 1970s. Problem areas included abusive management styles, arbitrary audition procedures, hiring attitudes that excluded minorities and women, non-existent job protection policies, and poor and inconsistent salaries and benefits. Improvements in these conditions for American musicians lagged far behind more enlightened European practices (a disparity this author addressed in articles contrasting American and European orchestra management policies).[5,6]

Labor–management negotiations over the years have resulted in substantial improvements for musicians in many larger orchestras. Yet many smaller, regional orchestras still offer partial, substandard wages with minimal benefits. Financial conditions for those in the popular music field, where synthesizers may replace entire bands and recordings may replace live performances, remain precarious and insecure. Moreover, symphony musicians who had won many gains have seen these erode in recent years.

Musical institutions, in common with many businesses and industries, have no immunity to the costs of the recent recession. Managements turn to the musicians to compensate for declining revenues; they declare bankruptcy, often in mid-season, or continue seasons by extracting large concessions from musicians as the price of remaining even marginally employed.

While contract agreements and enforcement of labor regulations can improve many environmental issues, others are simply facts of performers' lives to which they must make a satisfactory adaptation if they intend to continue in their profession.

Psychological pressures

Psychological pressures involve the maintenance of ego in response to nonphysical stress factors. Professional musicians must deal with psychological stress as they adapt to the intrapersonal (internal) and interpersonal (external) conflicts inherent to their profession.

Intrapersonal sources of stress. Intrapersonal conflicts, the musician's ability to cope with the anxiety of performing and with self-criticism, pose a major source of psychological stress. Stage fright, a fact of life for nearly all performers, is toxic in ways that can affect life off-stage as well as on. Anticipatory anxiety, the dread of future calamity or failure, can make a musician's life in the hours, days, or even weeks and months before a critical performance an unremitting purgatory and contaminate life for those around the performer as well.

On-stage anxiety varies from mild excitement, which can serve to enhance performance, to full-blown panic attacks with a host of physical symptoms including palpitations, dizziness, transient limb paralysis, uncontrollable shaking in the hands and legs, sudden memory loss, black-outs, cardiac arrhythmias, and even cardiac arrest.

Post-performance anxiety takes the form of remorse over real or imagined errors. Mental review, a sort of backstairs repartee, can range from an even-tempered appraisal of one's performance to judgmental processes generating symptoms resembling post-traumatic stress disorder, especially after auditions or competitions in which career aspirations are at stake.

Performance anxiety is not confined to actual concerts. Professional musicians must also endure over-supervision, a known stressor.[7] Their work in rehearsals and concerts takes place under the constant observation of conductors. Studies reveal increased stress for workers from excessive and intrusive over-managing styles.[8] Most office workers or, for that matter, physicians in their consulting rooms, would find it disagreeable to carry out their work with a supervisor overseeing every action, ready to question or overrule every decision.

The famous French horn player, Philip Farkas, once remarked that he preferred playing a concert to rehearsing under the tyrannical direction of Fritz Reiner, long-time musical director of the Chicago Symphony. "It was almost a relief to play the concert," Farkas said. "At least then Reiner couldn't stop and criticize you. And he never criticized in a kindly way."[9]

Performances before the public allow no second chances. When the trumpet player misses a note, everybody notices, and it stays missed. Recordings have conditioned audiences to expect note-perfect performances. As a result, critical standards for live performances have become unreasonable and exces-

sive. Musicians are painfully aware of these unrealistic standards used to measured their performances.

They also know that careers can suffer setbacks and even total destruction with a single negative review—a worry by no means limited to solo performers. Some years ago, a critic harshly reviewed the second horn player of the Metropolitan Opera Orchestra for an unacceptable level of missed notes and entrances. On the strength of the review, the musician was dismissed. He in turn sued the critic and won the case when cross-examination revealed that the critic could not distinguish one horn part from another. The musician, however, never recovered his position nor his career. The entire affair had a chilling effect on the other orchestra members, doing little to ease their performing anxiety.

Interpersonal sources of stress. Interpersonal factors include orchestra players' expressed frustration over lack of artistic control; conductors generally reserve to themselves decisions about interpretation, tempo, and style. The entire issue of managerial style has a more severe impact on musicians than on workers in other fields because of the nature of musicians' work. Unless players choose to perform in a disinterested, dissociative manner, emotional sensitivity must play a large part in a performance. This very sensitivity—the seeking for an intimate rapport with fellow players and with the inner spirit of the music—renders musicians more vulnerable. Disrespectful, thoughtless, or offensive verbal styles, often the everyday currency of many conductors, can do much damage at such moments.

While the public has little knowledge of conductors' abuse of orchestra members, musicians cite this problem as one of the most stressful factors in their working conditions, generating anxiety and hostility, and provoking many fine players to leave the profession. The conductor Kurt Sanderling once told of hearing a famous music director at a major opera house say of his musicians, "They are dogs. They have to do what I tell them." Sanderling, himself a model of respectful behavior toward orchestras, commented succinctly on this style: "Disgraceful!"[10]

Musicians who remain in the profession find ways to come to terms with these psychological pressures, and most develop mature adaptive coping mechanisms. These skills, aside from their technical and artistic capacities, enable them to sustain remarkably high levels of anxiety and perform consistently at levels sufficient to maintain careers. Many others, unfortunately, do so through maladaptive strategies. These musicians find themselves at high risk for psychological problems, alcoholism, and abuse of street and prescription drugs. They routinely ingest beta blockers as though they were after-dinner mints, frequently without any type of medical supervision.

Intrinsic factors

Some aspects inherent in careers of professional musicians create a third source for stress. These include conflict with the cycle of psychological development through which all people must travel, accepting the limitations of one's instrument and within one's self, the drive for excellence, the effort to ward off becoming stale, and inevitable loneliness.

Life-cycle conflicts. Psychological development unfolds in stages as we move through life, a process Erik Erikson referred to as "the life cycle."[11] Each level poses new challenges that require ever more complex reorganizations and integrations of the psyche. Professional musicians must work through not one, but two life cycles, the second one involving their artistic growth throughout their career. Like the life cycle common to all people, this second life cycle also contains within itself developmental stages. Often the two cycles conflict with one another.

For example, adolescence is a critical time for the developing personality. In these transformation years from youth to adulthood, dating, consolidation of sexual identity, and fine-tuning of social skills in small and large group activities enhance social confidence. Young musicians, however, may have commitments of three, four, or even six hours of daily practice, leaving them little time to develop their social skills. They may miss opportunities to broaden their horizons by nurturing other interests on which they can later rely to help them balance the demands of their music career.

Musicians lunge toward the top of their careers in their late twenties and thirties. But the pull of careers collide with the urge to begin a family, especially for women conscious of the ticking of their biological clock. The well-known cost to women who drop out of the business world is even greater for performers. They must find the time and energy, not only for the many re-entry tasks required in any career, but also to restore their athletic fitness and playing skills.

Perhaps the most poignant example of life-cycle conflict occurs later in the aging process. As performers continue to grow and mature as artists, it becomes evident that physical capacities diminish with the passage of years. Older musicians perceive the strength and vigor of their youth slipping away, even as they judge themselves and are judged by others against the very standard of strength and projection they helped to establish when younger. More noticeable in the winds than strings, and still more so for brass players, all players must eventually deal with this issue. Finally, if they have totally bound up their identity with music, parting from a performing career can seem like the end of life rather than the time for new beginnings and new choices. This can cause more stress, loss of connection to life, withdrawal, and depression.

Living with imperfection. Every instrument, including voice, has its special beauties and limitations. Musicians in a sense marry their instruments and must learn how to adapt to the frustrations and tolerate the limitations imposed by the choice they have made. Some deal successfully with this issue; some never resolve their ambivalent feelings.

Striving to realize one's own image of excellence, to exceed one's past accomplishments, and to reach new heights create a sense of living a rich and meaningful life. A price, however, accompanies such striving; constantly pushing oneself to the edge of comfort and beyond generates great frustration and anxiety. To sustain this tension requires a psychological makeup equal to the challenges imposed by setting artistic ideals or even simple, raw ambition.

The finest artists commit themselves to such tension. Isak Dinesen's opera singer in *Babette's Feast* says, "It is terrible

and unbearable for an artist to be encouraged to do, to be applauded for doing, his second best. Through all the world there goes one long cry from the heart of artists; give me leave to do my utmost."[12]

Only rarely do professional musicians believe they have realized the totality of their artistic vision on stage. The maturity to acknowledge and accept the gap between artistic vision and the realization of that vision in actual performance takes time to develop and sustain, posing yet another challenge in the musician's life process.

Fritz Kreisler said that in his youth he had a certain ideal of violin playing, and by age 25 he had achieved that goal only to realize that a new, more complex ideal had emerged. In his thirties, when he thought he had achieved that goal, a new goal again emerged. And so it went throughout his career. At his retirement, he said that he thought the gap between performance and ideal had become smaller, but it remained. To best tolerate this life-long process, one needs a strongly grounded ego and a well-rounded, balanced personality to find satisfaction in areas other than as a performer.[13]

In their study years and throughout a career, artists must walk a fine line, employing a positive obsessive style, without which excellence is unlikely, while steering clear of a negative obsessive style, which can disable any sustained creative effort by excessive self-criticism and fault-finding. This balancing act can rob musicians of any joy in making music and set the stage for cynicism or depression.

Inspiration and isolation. Musicians require fresh inspiration in their lives to revitalize their commitment, their energy levels, and their creativity. While most people have this need in common, staleness in performers becomes quickly evident, and the consequences of their loss of momentum can readily affect their careers. The trumpeter Harry Glantz once said, "If I don't practice one day, I notice it. Two days and my colleagues notice it. After three days, everyone knows it."[14]

Finally, musicians must live with loneliness. They spend countless hours in technical preparation, studying throughout their creative lives to maintain technical skills, learn style and interpretation, and master new repertoire. Performers learn to live with the many hours spent in isolation, but this can result in a sense of alienation and loss of identification with society.

At the time that young performers choose music as a career, they rarely recognize these elements connected with that choice for their fullest implications. To maintain excellence as a performer will always require enormous physical and mental discipline while so many stressors and uncertainties challenge commitment and create self-doubt about one's chosen career.

Freud said that our most significant life decisions are made from deep within the unconscious and are only partially subject to mediation by the conscious mind.[15] Few young musicians are equipped to see or acknowledge the many intrinsic stressors associated with the business of having a performing career.

Treatment

Musicians have historically disguised injuries and illness. They will play hurt, play through their pain, both physical and emotional, and continue to do so for years. Until the advent of the new specialty, music medicine, they had nowhere to turn for accurate assessment, diagnosis, and treatment of their problems, especially stage fright. But the traditional reason for disguising health problems remains an issue today.

If a player were too candid about a physical condition or about anxiety, might not this information reach the ears of management and the conductor? And then what consequences might ensue for the musician? This is a serious issue for performers who are not in employment covered by contract protection, which describes virtually all free-lance musicians.

Yet another issue tends to perpetuate disguising health problems. In common with our culture's attitudes toward mental health issues, an onus still attaches in many players' minds to acknowledging stage fright. This stands in the way of performers locating appropriate treatment, and secretiveness and nondisclosure aggravate anxiety. This is particularly regrettable since we know from many sources, Yalum for example, that in groups, individuals can find consensus and validation of their personal issues that can neutralize negative, self-accusing, and self-isolated feelings.[16]

Even more regrettable is the consequence of nondisclosure, denial, and lack of information. Many musicians do not know that most types of performance anxiety can be successfully treated with a combination of chiefly cognitive and hypnotic approaches. Training in relaxation techniques, stress reduction techniques, and cognitive restructuring, education about the nature of stress, and systematic desensitization and imagery rehearsal, are only a few among many effective modalities that prove helpful to many performers.[7,17–19]

Long-term analytically oriented psychotherapy does not serve these patients unless the need to deal with deeply embedded issues around early experiences exists. Even in such cases, patients can receive short-term remediation of stage-fright symptoms while dealing with long-term issues. The author has found brief treatment using hypnosis and imagery rehearsal highly effective in reducing stage fright problems to manageable levels, noting that the stronger the performer, the more likely that brief therapy will succeed.

Physicians' role in music medicine. Physicians can respond to the musician patient population through education. They can, in the role of advocates, recommend stress management programs as part of a rehabilitation schedule, directing patients to resources that can enhance their awareness of stress issues and the importance of bringing their lives into better balance.

In diagnosis, physicians should consider referral to mental health professionals to enrich the assessment and diagnostic process of the ill or injured musician since stress is most likely an exacerbating factor. Their findings and recommendations can benefit the patient when integrated into the over-all treatment plan.

Psychological assessment has a clear role in music medicine clinics and inpatient treatment settings. Psychological assessment can measure the severity of patients' stress as a contributing factor in the presenting problems, and patients' potential

for compliance with a treatment regimen. Short-term individual or group therapy can help patients adjust to the limitations of illness or injury during recovery and reduce the risk of relapse through premature return to playing, or a return to work with the same dysfunctional psychological habits that may produce new complaints.

Even during the primary interview and assessment, physicians can explore with musicians the stressors in their lives and how to deal with them. Of course, this takes time in a busy physician's schedule. One physician wrote, "At the end of the day, having seen 30 or more patients, with 10 more waiting, do I take 40 minutes to talk with a patient about her anxieties and stress or do I take 40 seconds to write a prescription for Valium (diazepam)?"[20]

Physicians can work with rehabilitation trainers and psychotherapists to design, with their patients, a rational program of stepped return to work. Treatment of physically injured patients keeps them as active as possible and advocates work hardening methods. The same approach applies to players with anxiety issues.

Conclusion

The practitioner who treats performers reaps a professional benefit. The many workplace stressors assailing more and more Americans have long been the everyday currency of the professional performing musician. Musicians, therefore, provide a metaphor for most working people, a warning sign of what affects all of us.

As in music, job security in business is becoming a myth. As more people work at home, the issue of isolation that affects musicians in their long hours of practice now affects other workers as well. Burnout symptoms in many occupations indicate that most people can benefit from developing sources for the re-invigoration and the inspiration that musicians must have.

What practitioners learn in treating performers contributes to general practice. Awareness of the role that stress plays in the lives of musicians in directly causing or exacerbating physical illness or injuries can extend to all patients and help to promote the delivery of more complete care. A factory or office worker, business person, or professional, may be viewed not just as a patient with illnesses or injuries, but also as a patient suffering from performance pressures and stress. Caregivers who treat these psychological symptoms in addition to the physical complaints stand a far better chance of bringing about a healing for the whole person.

The sole difference between musicians as a patient population and the general public lies in the greater number of work-related pressures and greater career consequences for performers with medical problems. Such patients can confront a physician with confusing, intense, and seemingly inappropriate demands. The automobile accident victim in the emergency room who insisted that the physician attend to his bleeding lip rather than the compound fracture of the right tibia seemed disoriented and confused. When the patient mentioned that he was the principal French horn player for the Philadelphia Orchestra, the patient appeared more rational and understandably concerned with the embouchure that was the source of his livelihood and that sustained his career and status as an artist.

The artist-performer, as a unique and sensitive patient, requires equally unique and sensitive approaches. A heightened awareness of the psychological concerns of performing artists will promote more successful treatment. Musicians who present in the physician's office with a sprained thumb, soreness in the carpal tunnel area, or anxiety are neither hypochondriacs nor hysterics, but simply ordinary human beings experiencing extraordinary stress. They not only suffer from injuries, but also face a perceived threat to the very core of their emotional lives, their social roles, and their identities.

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Life in the orchestra

David Fetter, B.M./Ed., M.A.

ABSTRACT: *The concert soloist and conductor are prominent figures within the orchestra. Their roles make extraordinary demands on them—demands that must often be fulfilled while dealing with the problems of travel. Maintaining one's skill is a constant concern. The orchestra musician is also constantly on guard to maintain performance excellence. Unusual work patterns, obsession with the job, and job stress can put pressure on home life. The strong emotional personality of the orchestra musician must adapt to the conductor's desires and musical tradition. The player must coordinate performance with other group members. Other factors contribute to an environment with rigid boundaries and to the isolation of orchestra members as a group. With the development of performing arts medicine, injuries are less stigmatized and better treated, and performance stress is better managed. A patient's view of medicine is offered here.*

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This paper is based on my years as a trombonist in a number of symphony orchestras—a career that closed with 16 years in the Baltimore Symphony Orchestra—and a more recent perspective gained as an administrator at the Peabody Institute. Of primary interest here is the orchestra musician, but first a brief discussion of two people closely involved with the orchestra: the soloist and the conductor.

The soloist

The concert soloist's life is one of constant travel. One must maintain an extraordinarily high standard of musical excellence, technical skill, and physical and mental stamina, while dealing with the vagaries of modern air travel and a nomadic existence.

For a guest appearance with an orchestra, the soloist remains in one location for nearly a week, for a solo recital, a few days. There is much personal contact with local managers, who arrange press meetings, rehearsals, concerts, and other essentials, and with the soloist's manager, who is probably based in New York City and who works on future concert and travel bookings. The soloist on tour must reserve time for personal practice. There may be time for contact with friends, if one has any in a strange place. There may be periods of isolation between concerts or while traveling. The

soloist must always be on guard to avoid injury or impairment that might affect, even marginally, the quality of performance. For example, going out in the cold for a newspaper could be dangerous, especially for a singer. It is not much of an exaggeration to say the soloist is married to the art.

For the aspiring soloist, stiff competition for concert bookings and at performance competitions demands a certain level of commitment, stamina, and skill. Other traits needed, but not necessarily assured by the selection process, are ease with people, including audience members and donors; joy in performing before thousands of people (some artists, elevated by great talent, are nonetheless reluctant participants); a good business sense with a flair for self-promotion; the judgment to avoid burnout from trying to do too much too soon; and a strong personality adaptable to an unusually stringent, but rewarding lifestyle. Fortunately, experienced soloists often mentor promising performers. A good personal agent or manager will also provide good counsel.

The conductor

The conductor must maintain a similar level of musical excellence to that of the soloist. At the same time, the orchestra's resident music director must act as corporate manager, judge of talent, and musical-political leader. He or she is the target of inquiry and advice from many quarters—the board of directors, management, donors, soloists, agents, orchestra players, composers, audience members, the public, and the press. He or she must also administer, with the help of management, a complex organization, maintaining its artistic image and mission through the selection of soloists, orchestra musicians (a choice in which the musicians usually have a voice), and repertoire. The conductor must also find substantial time for isolated study to weigh artistic decisions that often affect the organization for years and to study scores for upcoming rehearsals and concerts. With so many responsibilities, the conductor will best be a person who thrives on attention and pressure.

Many conductors hold permanent positions with one to three orchestras. This locates them in particular cities for a given number of weeks per year. Many other weeks are typically left free for guest conducting appearances, where travel demands are similar to those faced by the soloist. The traveling soloist and conductor can reduce preparation time by repeating a limited selection of works in a succession of cities.

The orchestra musician

Weekly routine. Actual playing time per week of most leading US orchestras is around 20 hours—the norm for what orchestra players can tolerate while still maintaining a high performance standard. Moreover, the musician usually practices individually and often must maintain an exercise program. Some teach, but many hours of this can sap the energy needed for performance. Players teach as repayment for having good teachers, to preserve traditions of performance or pedagogy, to develop a reputation as a teacher, or to earn money. Some contribute volunteer hours to the orchestra or other organizations. Some are active in related fields, such as musical instrument building.

Musicians in top orchestras enjoy an extraordinarily high number of vacation weeks per year, often around six. This helps relieve stress, but usually only once a year enough weeks are found together to spend time away from the instrument. Weeks off are usually designated by management rather than chosen by the player.

In the orchestra musician's daily routine, proper rest is essential, especially for the older person. Before an evening concert, any activity that would take the edge off performance skill must be avoided. It may be necessary to forgo certain foods, alcohol, and caffeine. There is constant watch on preserving the ability to perform. Normally, a general personal routine is developed and obsessively maintained, including specific mental and physical preparation in the hours before a performance. Upset of the routine can cause stress.

Home life. Because an orchestra usually remains in its home city, the orchestra musician can enjoy a more stable home life than the soloist and conductor. Orchestra touring presents challenges similar to those of the touring soloist and conductor. Wherever the performance, the musician is subject to the same persistently high standard.

Because musicians generally perform evenings and weekends, work patterns conflict with household members with more traditional work schedules. Typically, the orchestra holds daytime rehearsals early in the week and evening concerts later in the week. At worst, concerts are on three or four consecutive nights and Sunday afternoon, blocking out most normal family time. The musician's only day off may be Monday. Some families adjust better than others. The spouse who works normal hours may be distressed by repeated evenings with no companionship. The musician's 24-hour health watch may also cause irritation.

Rotation. Large orchestras normally have sufficient staff to allow members some rotated concert time off. Some orchestras guarantee a few personal leave days per year. Wind sections often carry an extra player to allow rotated time off, since solo wind players cannot afford to show the effect of fatigue.

Effect on spouse. The orchestra musician's spouse can experience fatigue from living with the orchestra member's typically intense fixation on the job. Often the spouse is also a musician with similar career intentions, but the spouse may find it impossible to engage in musical pursuits of equal status or adequate interest, causing tension. The orchestra member may add emotional pressure by bringing home stress from rehearsals and concerts. Over time, the orchestra member's spouse finds ways to cope, or there may be a breakup. Orchestras would do well to pay attention to the effect of this sort of conflict on player stability.

Sometimes both members of a couple are in the same orchestra; sometimes they play the same instrument. There are advantages here, but there are also disadvantages for those who cannot adjust well to living with a fellow expert of strong character and usually strong opinions.

Standard of perfection. Musicians face a perpetual standard of perfection. Of course, perfection is impossible, but this drives a highly motivated person to try harder. The perfectionist gives irrational emphasis to mistakes, leading to a loss of self-esteem. Highly successful people sometimes remember only what went wrong. The self-examination that helps a musician excel can thus become destructive. Each rehearsal or performance brings a new test. Touring and recording increases pressure. The better the orchestra, the greater the challenge. Every day the musician faces the toughest audience—the 95 or so fellow perfectionists in the orchestra who are always assumed to be listening with the greatest scrutiny.

The group member. The soloist and conductor enjoy a certain latitude of self-expression in planning and performance, but the orchestra musician seldom has influence on the choice of music or how it is interpreted. Much of this is determined by the conductor and traditions of the art. While playing, the orchestra musician must adjust every second to the performance of the member's own section and to that of the whole orchestra, while following the guiding motions of the conductor. Orchestra seating, which can rotate in some string sections, and concert dress are also determined for the player.

Added to this regimentation are repeated performances of "favorite" classics and pops concerts, which tend to dull the sensitivity and deplete the stamina needed for classical performance. If a particular favorite challenges physical limitations, its repetition can increase anxiety and perhaps create or exacerbate physical problems. To prepare for touring or recording, works may be repeated several times.

Individual character. The typical orchestra member displays a staunch personality, strong emotion, high intelligence, and great self-motivation. These traits are necessary to sustain many years of study and to persist in the highly competitive orchestra audition market. Often, the strong personality is muted in the everyday persona. Many orchestra members have plans to be soloists or conductors, fueling intense evaluation of the soloists and conductors for whom they play.

The talented personalities who produce the enormous emotional power of the symphony orchestra normally engage in a constant obbligato of observation, second guessing, and debate about what goes on around them. Usually, little notice of this is taken by others. This increases isolation of a group already distanced from its audience. It is a great cultural waste that so much intellectual and emotional energy typically produces nothing but occasional eruptions of frustration that occur at the end of the three- or four-year cycle of symphony contract negotiations.

Some musicians fit the stereotype of the selfish, irrational, emotional artist who never grew up, but most have strong feelings combined with a deep intellectual commitment to the art. This and strong character make them tough at the bargaining table.

More contact with audience members might provide some relief from the isolation of the orchestra. This could deflect some of the perfectionist's self-criticism, since music lovers are typically very positive and appreciative. Conductors and soloists often have this sort of audience communication as they are usually well-known and since there is a tradition of meeting audience members after a concert.

The above comments are not to say that symphony musicians do not enjoy music. While some are disgruntled, the healthy remain passionate about the art. This is often the key to satisfying audiences.

Performing arts medicine

Until the last few years, performance-affecting ailments of musicians were usually closely held secrets. There was fear of job loss should any weakness become apparent. Problems that could be dealt with quietly went unmentioned. A problem could be exacerbated by measures taken to conceal it. Once in a while, an illness or injury became so severe that there was a public breakdown followed by a musician's sudden departure to an unknown future.

With the advent of performing arts medicine, musicians slowly began to talk to each other about injuries related to performance. Stigma attached to injury was reduced. An understanding of problems and genuine interest in recovery grew among musicians and management. In earlier years, a career might have ended, but some orchestras now have disability plans to supplement salary lost during recuperation. While performance-related injury may be covered by workers' compensation insurance, this option is seldom, if ever, pursued. Artists are a challenge to medicine, since they usually require 100% recovery to regain performance-level skill.

A better understanding has come of performance anxiety. There is also greater awareness of the importance of a compatible work environment, including comfortable seating and protection from excessive noise. Chairs and cushions have been designed to aid posture, and ear plugs and sound baffles have been developed to allow a musician to hear with the refinement necessary for coordination with colleagues in the ensemble.

During the infancy of performing arts medicine, most major orchestras were increasing seasons to year-round employment. Longer seasons may have increased the number of injuries, although the percentage of orchestral musicians affected by any injury, from the slightest to most severe, has been consistently around two-thirds in orchestras surveyed, including a study of the Baltimore Symphony Orchestra in which this writer took part.

The next step—prevention of performance-related injury—is coming slowly. Students and professional musicians lead intense, busy lives. Players may resist taking time for a general physical warm-up before a practice session or performance, especially if it seems this may detract from the primary business of music making.

Dealing with stress. The best remedy for performance anxiety is frequent experience performing in front of an audience. An inexperienced or distressed performer should start with small groups of people, usually family and friends, and work up to larger gatherings. It is important to perform for friendly music lovers, who can be inspiring. It helps if the orchestral musician participates in a solo or chamber music recital, or enjoys some different sort of performance.

Musicians employ a variety of techniques to alleviate stress.

Some are used by the general population, such as exercise. The programs of Alexander and Feldendkrais aid posture and breathing, areas of special interest to wind players and singers. Imaging is used to visualize what it will be like to perform on stage. Some add the power of positive thinking, a challenge for the perfectionist made pessimistic by experience. Some "focus on the music," directing thought only to the desired musical result of a performance. Some musicians calm themselves through biofeedback or meditation. Psychotherapy is sometimes necessary. Orchestra managements would be wise to refer players to professionals familiar with artists' problems.

Some musicians rely on beta blockers, which, in this writer's view, are a crutch to be avoided. Because musicians are obsessed with perfection, one can become dependent on anything seen as a potential aid. Adding drug use to a stressful situation is dangerous. It is said that beta blockers are not physically addictive, but they may have an addictive affect on an intense personality made somewhat irrational by stress.

In the injured musician, there is danger that relief of symptoms with drugs will aggravate an injury should the player interpret the pain relief as true healing. In this context, normally beneficial drugs may allow damaging activity.

The patient's view of medicine.

At a conference on arts medicine at the Medical and Chirurgical Faculty of Maryland in January 1992, John DeHoff, M.D. asked a panel of musicians, including this writer, for their views on medicine. This writer has had his share of minor performance-related medical problems. Advice and treatment from physicians has enhanced his performance and teaching. The following axioms were developed from a different perspective—that of one under treatment for nonperformance-related illnesses:

- Avoid telephone medicine because the treatment indicated will depend on your view of the illness.
- Say "yes" if a health professional asks you, "Is this an emergency?" What if you say "no" and you turn out to be wrong?
- If you get sick on a weekend, someone will be on call, but you may not be able to avoid telephone medicine. You may have to make a judgment about the seriousness of your illness: Should you wait until Monday or go immediately to the emergency room?
- Your doctor may not be aware of peripheral, everyday, nonmedical information that can ease your recovery. Ask how you can contact others who have had your illness.
- Campaign for prevention. There is bias against disease or injury prevention built into many health care plans in that they do not pay for a simple checkup. ■



Consultation, a weekly radio program sponsored by the Medical and Chirurgical Faculty of Maryland allows Med Chi physicians to appear each week on WBAL to discuss the lastest developments in medicine and to answer questions about health issues. Med Chi currently airs the following program of Consultation weekly:

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Speak Out on Consultation

Consent to treatment: Application to performing arts medicine

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ABSTRACT: *Because treatment outcomes may have an effect on performing artists' livelihood, physicians should involve these patients in the treatment planning phase by obtaining informed consent. Treatment without consent is a battery. Physicians have several available lines of defense against an allegation of failure to obtain informed consent, including reasonable documentation of treatment plan discussions with patients; the "so what!" defense, which states that the patient would have agreed to treatment despite the risks; and the "unduly alarming" defense, which contends that based on past experience with a particular patient, proper disclosure would cause undue emotional distress. Alert compliance with the laws governing consent for treatment and sound medical judgment are every physicians' legal, ethical, and moral duty.*

All physicians have the duty to obtain consent prior to treatment from every patient or from the patient's legal guardian. Physicians have a professional obligation to be aware of the laws governing consent and informed consent. Physicians who treat professional performers have a special obligation to disclose those adverse effects that are inherent in a particular treatment modality or procedure, particularly where the adverse effect may affect patients' professional survival not just their physical survival.

A physician who fails to obtain a patient's consent to treatment, who gives medical treatment involving an unpermitted contact, commits a battery. American courts vigorously guard a person's right to self-determination with respect to his or her physical integrity,[1,2] and in a battery action, personal indignity has considerable weight. Thus a physician would be liable not only for contacts that cause physical harm, but also for those relatively trivial ones that are merely offensive and insulting,[3] such as spitting on another's personage. A battery action does not require expert medical testimony because the issue is not one of medical science, but whether the physical contact in a given case was unpermitted. A plaintiff may recover damages (money) for unpermitted contact in the absence of physical injury.[1]

Physicians and lawyers familiar with medicolegal issues know that a successful action against a physician based solely on the issue of battery is extraordinarily rare, probably because where expressed (vocal or writ-

ten) consent is not apparent, implied consent will almost always be found. Implied consent is apparent under many circumstances; for example, by some manifestation (head nod), through an overt sign (rolling up one's sleeve for an injection), or when the patient fails to object while being touched. One who consents suffers no wrong. Medical situations in which implied consent is readily apparent include treatment of minor children who require emergency care, comatose patients who require immediate treatment, mentally incompetent patients who need treatment to prevent serious consequences, intoxicated patients who temporarily lack the capacity to reason, and patients who do not sign a consent form (or who may not have given verbal consent) but who allow treatment to proceed without objection.

When a patient consents to treatment, the scope of the consent is limited to the parameters expressed prior to treatment. Permission to operate on the right ear is not permission to operate on the left ear; incidental appendectomy without prior permission during a panhysterectomy could be a battery. On the other hand, if during the course of an operation, a physician discovers disease not anticipated before surgery, he or she would be justified in extending the operation without expressed consent in order to remove or palliate morbid disease.[4]

Consent to treat minors

The general rule of law requires a physician to obtain parental consent prior to administering medical treatment to a minor (less than 18 years of age in Maryland). Most jurisdictions have enacted statutory exceptions to the general requirement for obtaining parental consent. Maryland law presents a typical list of exceptions including the following:

- if the minor is married,
- if the minor is unmarried but a parent,
- in statutory therapeutic exceptions (chemical abuse, venereal disease, contraception, physical examination for rape, pregnancy, abortion, and psychotherapy),
- in emergency care, or
- if the minor is emancipated.

Most physicians know that when death appears imminent without emergency treatment, consent will be implied. On the other hand, what reasonable steps can a physician undertake when the medical circumstances are not yet a true emergency, but reasonable medical judgment requires that the physician should anticipate the need to intervene at some point in order to prevent an impending medical disaster or permanent injury?

Case 1. A 16-year-old professional ballet dancer comes to the emergency department for evaluation and treatment of a displaced, compound, comminuted fracture of the femur. The emergency department physician quickly straightens the lower extremity to reduce the potential permanent neurovascular damage, and summons an orthopaedist. The patient's parents are not present.

The physician follows these steps: first, comfort the patient; second, use all reasonable means, including administrative assistance, to locate the parents; and third, make a reasonable medical judgment, in the best interest of the patient, concerning how long an orthopaedist should wait for parental consent. Assuming that a reasonably safe period is 20–30 minutes before encountering a high risk of bone infection and/or neurovascular damage, after 30 minutes the orthopaedist explains the necessity of the surgery to the ballet dancer, then proceeds. Two hours later the parents, who were nowhere to be found before the surgery, appear in the emergency department and confront the orthopaedist about operating without their consent.

The orthopaedist has two medicolegal defenses: first, despite a reasonable effort to contact the parents, they were unavailable; thus, from a legal point of view the parents had constructively abandoned their child; second, the circumstances placed the physician in the position of having to act *in locus parentis* (as one of the parents on-the-spot)—that is, acting as a prudent parent who would have consented to surgery after receiving reasonable disclosure about the adverse effects of an untreated compound fracture of the femur.

Case 2. Another case involves a 14-year-old boy, an extraordinarily talented violinist, who 10 minutes before arriving in the emergency department had dislocated the fifth finger of his left hand. Upon examination, the emergency department physician notes a dislocation of the distal phalanx, and within a matter of seconds the physician reduces the dislocation. X-ray examination reveals no fracture. The parents object to the emergency department physician's treatment of their child without an orthopaedic consultant.

The emergency department physician has two medicolegal defenses: first, an orthopaedist was not immediately available; second, immediate action was justified based on the knowledge that the longer a dislocation remains unreduced, the more likely permanent injury could occur in the form of fibrosis or neurovascular damage, which would be of special concern to a highly talented violin player.

Consent by spouse

American law does not generally recognize the authority of one spouse to consent to treatment for the otherwise competent spouse. Most physicians, at some time or another, have been intimidated by a patient's aggressive spouse. Some physicians and spouses mistakenly believe that, because marriage inherently endows one spouse with the right to co-consent for the other spouse, or even a right to veto the other spouse's given consent, marriage therefore compromises a patient's right to consent. In Maryland, the court of appeals settled the issue in 1889:

> Surely the law does not authorize the husband to say to his wife, "You shall die of the cancer; you cannot be cured, and surgical operation affording only temporary relief will result in useless expense." The husband has no power to withhold from his wife the medical assistance that her case might require.[5]

In 1974, the Oklahoma Supreme Court reviewed a case in which J.C. Murray, husband of Artie V. Murray, sued Dr. D.C. Vandevander alleging that Dr. Vandevander performed a panhysterectomy on his wife without his consent. The suit did not

allege that the doctor was negligent. The Oklahoma court cited the Maryland case and ruled that a married woman in full possession of her faculties has an inherent right, without consent of her husband, to submit to a surgical operation upon herself. The husband has no inherent right to consent for his wife, nor does he have a right of refusal that can override his wife's consent to treatment.[5,6] In 1976, the US Supreme Court[7] reviewed the constitutionality of a Missouri statute on abortion and ruled that during the first 12 weeks of gestation, the requirement for a co-consent by the spouse or a parental consent for a minor was unconstitutional on the basis that a state cannot grant to a person veto power the state itself does not possess. For reasons similar to those cited in the three cases just discussed, American law does not recognize a family member's right to consent for another family member unless the family member is a legal guardian appointed by a court of proper jurisdiction, or is the natural guardian of a minor child.[8] There is a trend for state legislatures to modify the common law on family consent, particularly where the issue of consent involves an incompetent patient.

Informed consent

Whereas traditional consent emanates from the law of battery, informed consent emanates from the law of negligence. In order to prevail against a physician for legal negligence, the plaintiff must prove four elements:

1. the applicable standard of care in the given case;
2. the physician breached the applicable standard;
3. the plaintiff sustained an injury; and
4. the injury was proximately caused (logically related) by the breach of the standard of care.

In order to hold a physician liable for a lack of informed consent (failure to disclose enough information in order for the patient to make an informed intelligent choice), the patient must prove that the physician breached his or her duty to disclose enough information and that the *breach* of that duty *caused* the injury. In other words, where there is no injury, an action for a lack of informed consent will not stand. This information leads to the reasonable conclusion that a plaintiff in an action alleging a lack of informed consent could prevail even though the traditional consent was obtained, and even though the physician's performance fell within acceptable standards of medical practice.

Physicians should realize that the legal doctrine of informed consent has very strong moral and ethical overtones. The American Medical Association's first, second, and fifth principles of medical ethics[9] state that a physician shall make relevant information available to patients; the American College of Physicians emphasizes that a patient should be informed and educated about his/her condition, should understand and approve of treatment, and should participate responsibly in his/her own care.[10]

Accepting the fact that American courts have defined a legal duty requiring physicians to disclose relevant information to a patient prior to diagnosis and treatment, how much information does the law expect a physician to disclose in order to fulfill the duty to inform? What are the elements of informed consent? Based on a number of appellate decisions and Maryland law on informed consent,[11–13] practicing physicians should note the following elements of informed consent:

- The physician should explain to the patient the nature of the procedure, treatment, or disease.
- The physician should inform the patient about the expectations of the recommended treatment and the likelihood of success.
- The physician should tell the patient about reasonable, available alternatives and what the probable outcome would be in the absence of any treatment.
- The physician should inform the patient about the particular *known inherent risks* that are *material* to an informed decision about whether to accept or reject medical recommendations.[14]

The first and second elements are rarely pivotal issues in an informed consent allegation. The third element is generally not a pivotal issue except when a reasonable alternative might have proven safer or when the outcome of no treatment does not significantly differ from the outcome of treatment.

The fourth element requires basic understanding of the legal distinction between an inherent risk and a material risk. An *inherent risk is a medical concept*—one of a number of known adverse effects that may occur even when the drug is properly administered and indicated, or even when a diagnostic procedure or surgical operation is properly performed. A *material risk is a legal concept*—a particular inherent risk that a physician knows or ought to know would be significant to a reasonable person in the patient's position in deciding whether to reject or accept treatment.[13] The physician must measure the scope of the disclosure by the patient's need to know whether a potential peril is material in making an intelligent informed choice. A physician may delegate authority to obtain informed consent to another physician (house staff) but cannot delegate his or her responsibility.

Apparently, appellate courts believe that physicians are in the best position to decide what information should be disclosed. When physicians inform patients about the medical risks of a procedure or treatment, they hope that the disclosure will suffice to overcome an action for a lack of informed consent. On the other hand, appellate courts have furnished physicians with formidable defenses against an action for a lack of informed consent.

Determining the scope of disclosure

State courts vary on whether the general or professional standard of disclosure should apply in an action for a lack of informed consent. The general standard allows the jury to determine whether the physician disclosed enough information for a reasonable patient to make an informed treatment choice; whereas, the professional standard permits other physicians to testify about whether the defendant physician disclosed sufficient information. The legal sufficiency of disclosure is based on community standards of medical practice. The modern trend is for courts to adopt the general standard. Maryland adheres to the general standard.

Determining the standard of causation

In the legal arena, a patient would not only have to show that the scope of disclosure was inadequate, but must also show that the lack of disclosure (insuffient information to make an informed decision) was the proximate cause of the injury (e.g., hearing loss secondary to treatment). In other words, if a patient had been sufficiently informed, that patient would not have accepted treatment and hearing loss could have been avoided. Depending on the jurisdiction involved, courts have taken at least two different approaches in determining whether a lack of informed consent caused an injury. In the first approach, the *subjective standard of causation,* the jury decides whether the patient would have refused treatment if the physician had imparted the allegedly sufficient information. In the second approach, the *objective standard of causation,* the jury decides whether a reasonably prudent patient (not the patient making the claim) in the patient's position would have refused treatment under the same or similar circumstances. Maryland adheres to the objective standard.

The treatment of hyperthyroidism provides a good example. Three modes of treatment remain in vogue: drug therapy, radioactive iodine, and subtotal thyroidectomy (especially for tumors and obstructive symptoms). The material risks of drug therapy are recurrence of hypothyroidism (72%) and agranulocytosis (less than 1%). The once-feared adverse effect of developing thyroid tumors in later years has not proved more likely to develop in patients treated with radioactive iodine than in patients from a randomly selected population; however, the incidence of a post-radioiodine type of hypothyroidism at 10 years ranges from 40%–70%.[15] Laryngeal nerve injuries that cause hoarseness are well-known risks of thyroidectomy. Vocal cord injury, an inherent material risk of subtotal thyroidectomy, should be disclosed not only to persons such as Placido Domingo and Luciano Pavarotti, but to anyone, because the loss of voice is a devastating injury.

Case 3. A 55-year-old symphonic percussionist develops an *E. coli* peritonitis secondary to a knife wound, which had been repaired several days earlier. He complains of fever and chills. The organism is sensitive to gentamicin, which is administered intravenously in proper dosage for 2 weeks. Gentamicin peak and trough serum levels are within acceptable limits. Shortly after being discharged from the hospital, the percussionist notes that he is not hearing as well as he did prior to his illness. He learns from talking to a friend in his musical circle that gentamicin is a known cause of hearing loss. Audiometric testing reveals that his hearing loss occurs primarily in the frequencies above 4,000 hertz; the audiologist does not consider this loss debilitating. Pretreatment audiometry had not been performed.

Increasing evidence shows that symphonic musicians develop high frequency hearing loss from acoustic trauma, an occupational hazard. Because the patient did not have a pretreatment audiogram, the issue of gentamicin ototoxicity becomes murky and usually favors the injured party. The percussionist claims that if he had known about the ototoxic potential of gentamicin, he would have opted for an alternate therapy. Some physicians favor avoiding aminoglycosides when other regimens equally effective against *E. coli* peritonitis exist.

Physicians, aware that musicians are inherently at risk for high frequency loss from occupational acoustic trauma, should refer these patients for audiometric testing, where practical, prior to the use of a potentially ototoxic drug. The best medical therapy should not be compromised solely on the basis of potential drug toxicity; nevertheless, when equally effective nonototoxic drugs are available, physicians should prefer these. Above all, physicians should inform patients and give them the opportunity to make informed choices.

Defenses for a lack of informed consent action

The collective experience of the medical profession indicates that many patients forget or do not understand what physicians say during an informed consent session. Good documentation provides a defense against an action for lack of informed consent, and unquestionably enhances physician credibility. The informed consent note need not contain great detail, but it should make a convincing statement that the patient received enough information to make an informed choice. For example, a physician treating John Sharpe (a lyric tenor) recorded in a consent note a discussion with him of the possible adverse effects of subtotal thyroidectomy, including loss of his voice and/or the loss of his parathyroid glands, which would require life-long therapy in order to maintain normal serum calcium levels.

A second defense involves the lack of immediate capacity of a patient to consent; for example, patients in coma, patients with transitory intoxication, mental retardation, or psychosis, or patients who as minors may be mentally competent but lack legal capacity to consent. One would not expect informed consent to be an issue during a medical emergency.

The third defense involves a "so what!" defense. The physician proffers that even if the patient had been informed of the risk at issue, the patient would have nevertheless consented to treatment.

Case 4. A 35-year-old musician sustains severe abdominal trauma. Gross hematuria is apparent. The traumatologist orders an intravenous pyelogram (IVP), following which the patient dies from an anaphylactic reaction despite appropriate treatment. His wheelchair-bound spouse files a law suit for the estate of the deceased, alleging a lack of informed consent, contending that if the decedent had been informed about the approximately 1:50,000 chance of dying from an IVP, more likely than not he would have refused the procedure, and she would have continued to benefit from her husband's musical skills.

The physician's medicolegal defense is that even with information about the risk of an IVP, the patient would have nevertheless consented because the immediate risk of dying from renal trauma far outweighed any very rare risk of death from an IVP.

A fourth defense, the "unduly alarming" defense, provides the physician with an opportunity to contend that material information was withheld in the patient's best interest to keep the patient from worrying over consequences while still opting for treatment.

Case 5. A middle-aged musical director has an established diagnosis of urate kidney stones and evidence of urate nephropathy. Treatment includes alkalinizing the urine, urging the patient to maintain hydration, and prescribing allopurinol in order to prevent further stone formation and to prevent or reduce the chances of renal failure developing from chronic urate nephropathy. Six weeks later, the patient develops toxic epidermal necrolysis (with corenal scarring and near blindness), a known and quite rare adverse reaction to allopurinol.

In this case, the physician has two medicolegal defenses based on long-term familiarity with the patient. The first would be the "so what" defense. The second defense would be the "unduly alarming" defense; that is, the physician did not tell the patient because he would have accepted the treatment in any event, but would have become unduly alarmed; thus, the patient would have become an emotional cripple from extreme worrying, insomnia, diarrhea, and anorexia. Acceptance of the "unduly alarming" defense by a jury would depend on a physician's ability to establish a credible knowledge of the patient's emotional character.

Physicians who treat and help members of the performing arts will find such patients understanding, cooperative, and grateful, especially when physicians maintain an awareness of whether the potential adverse effect of a drug might cause dystonia or hearing loss, and whether any treatment might impair the occupational effectiveness of a performing artist. Allowing the patient to participate in the treatment program through informed consent is a legal, ethical, and moral duty. Physicians should remain aware that a musician, dancer, or actor who cannot perform has lost both professional stature and earning power.

Primun non nocere. "First do no harm" is the first principle that should be applied in the practice of performing arts medicine.

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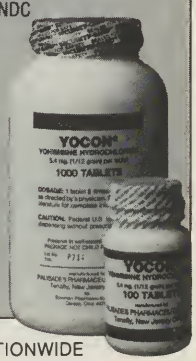
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From the Editor's Desk

BCBSM executives meet with Med Chi leadership

"We are not in financial difficulty," said Frank Gunther, chairperson of the Board of Directors of Blue Cross and Blue Shield of Maryland (BCBSM). "We are financially solvent and do not have a liquidity problem." Mr. Gunther, accompanied by William Beasman, acting chief executive officer (CEO), and Arthur T. Keefe, Jr., M.D., vice president and corporate medical director, spoke to over 35 Med Chi physicians on February 24, 1993 in an effort to allay physician concerns about the stability of Maryland's largest insurer.

Financial concerns

Both Gunther and Beasman related events that occurred during the July 1992 hearings by describing the situation surrounding the discrepancy over the actual net worth of BCBSM. Mr. Gunther emphasized that, through the entire investigation, there were no indictments or evidence of criminal activity. He added that the U.S. Senate is not seeking further investigation. "The main concern among the general public was the financial stability of BCBSM," he said.

Mr. Gunther described how the valuation of CareFirst, a BCBSM subsidiary health maintenance organization (HMO), changed the overall worth of the company. "The insurance commissioner asked BCBSM to take over CareFirst," Mr. Gunther said. "We paid $32 million for CareFirst and counted that as part of our asset base. During the US Senate hearing, it was asked whether an asset is worth how much one paid for it or how much one can sell it for, which would require an outside impartial evaluation. The insurance commissioner then directed BCBSM to delete the $32 million until that evaluation was completed.

Another factor affecting the company's reported worth was the $42 million BCBSM had loaned its HMOs. "In April 1992, BCBSM signed an agreement with the insurance commissioner's office stating that BCBSM would amortize the $42 million over a six-year period." Following the US Senate hearing, however, Gunther said, "the insurance commissioner requested BCBSM to take the $42 million off the books for that year." As a result of these accounting changes, the reported net worth of the company dropped from $100 million to $26 million. A recent evaluation by Legg Mason values the worth of all of BCBSM HMOs at $80 million. "In fact, the HMOs generated over $10 million in profits during 1992," Gunther added.

Physician relation concerns

Med Chi President-elect Joseph Snyder, M.D. was among the physicians who posed questions to the BCBSM executives. "I've heard about your financial condition and your effort to improve service," he said, "but I'm concerned about BCBSM's relationship with it providers—the physicians. I'd like to see physicians have more input into the policies of your organization."

Mr. Beasman concurred with Dr. Snyder's concerns and said, "One of the things that shocked me when I became acting CEO was the poor provider relations. There was almost an arrogance in dealing with providers. I believe doctors are our customers and the customer is always right. BCBSM has to start treating its providers as customers. The providers are absolutely essential to our welfare, our future, and our survival. Without their cooperation, without their good will, we have no reason to be in business."

Mr. Gunther agreed. "We have to spend more time interfacing with providers. They are the lifeline of everything that we do. We have a number of board vacancies coming up, and we invite interested physicians to contact the nomination committee."

He added that current BCBSM bylaws state that physicians may comprise up to 25% of the board. Legislation pending in Annapolis (as of press time), however, may limit terms of board members and require 11 members of the current board to step down, leaving several vacancies.

Management concerns

Alan O'Shinsky, M.D., treasurer of the Maryland Society of Otolaryngology—Head and Neck Surgery, stated he, too, was concerned about provider relations. "I believe improving provider relations is essential to restructuring the company," he said. Dr. O'Shinsky added his concern that restructuring may be difficult as several top BCBSM executives have been removed. "Why did the board allow the company to get into such a state that they had to fire the top executives?"

Mr. Gunther replied that Carl Sardegna came to BCBSM eight years ago. He explained how Mr. Sardegna turned BCBSM into a financially sound organization. "In hindsight," said Gunther, "we found out that we addressed the financial issue and ignored the service issue. We reduced the number of people who help physicians track down claims and the amount of training our people had, and we did not make proper investments into new systems. It caught up with us."

Gunther added that a primary reason for the resignation of many top BCBSM executives was the service problem. "In 1998, the national BCBS put BCBSM on its watch list because of poor service. The board did not know this. When I became the chairperson of the board in October 1992, I received a letter from the national BCBS. The letter described a service commitment Mr. Sardegna had made to the national BCBS in April 1992. The letter basically said that BCBSM had not met the terms of the agreement. I knew nothing about this agreement."

To address this problem, Mr. Gunther traveled with Mr. Beasman to Washington, DC to meet with executives from the national BCBS. "They put a projection up on the wall that said we had been on probation since 1988. We knew nothing about it."

He added that the leadership was removed because Mr.

Sardegna withheld vital information from the board. "Mr. Sardegna's management style was to accentuate the positive and totally ignore the negative," said Mr. Gunther. "If it's good news, give it to the board, if it's bad news, fix it before the board finds out. The board was not aware that service had lapsed to the point that it had."

"Attention was devoted to building up the black ink," said Gunther, who added that the company might have been even more profitable if the board had been made aware of the excessive expenditures that occurred under Mr. Sardegna. "I found out that we spent between $5-6 million a year for outside consultants. These expenses were not approved by the board."

Service concerns

With regard to service, Med Chi Council Chairperson Joseph Fastow, M.D. commented that he had experienced difficulty with BCBSM assigning correct physician-provider numbers to new physicians. "We waited as long as nine months to get a new physician a provider number for Medicare. There is no reason why physicians should have to wait 90, 120 or 180 days before they are assigned a number."

Dr. Keefe addressed Dr. Fastow's concern stating that it is a recognized problem. "We are currently attempting to address that issue," he said. "Service is now our number one concern," added Mr. Gunther. "We have done a terrible job on service, and we have got to turn it around."

Mr. Beasman added that he believes the company will fare well under the leadership of William Jews as the new chief operating officer. "William Jews is a customer-oriented person," he said. "He will respect the interests of all our customers —both providers and subscribers."

At the conclusion of the meeting, the BCBSM executives urged physicians who did not have the opportunity to pose questions to submit them in writing. They also stated that BCBSM would do its best to answer physician questions and address their concerns. ■

BCBSM update

February 23, 1993 — By a vote of 134-1, the Maryland House of Delegates passes a measure placing strict state controls over BCBSM. The bill requires the insurer to

- disclose more of its financial records;
- maintain a cash reserve equal to one-month worth of premiums;
- restrict its business to health-related activities;
- include consumers on the board of directors; and
- limit the terms of BCBSM board members to six years. [1]

February 25, 1993 — The BCBSM board votes to revoke supplemental retirement packages for former Chief Executive Carl Sardegna and former Senior Vice President Fred M. Gloth, Jr. The cost of both supplemental retirement packages is estimated at $5.1 million. Frank Gunther, chairperson of the board, had said previously that the board approved the formula for the retirement packages but was not aware of the total cost. The board's decision came after a meeting with attorneys and after BCBSM received a letter from Attorney General Joseph Curran demanding BCBSM revoke the supplemental retirement packages. [2]

March 3, 1993 — BCBSM releases an accounting of its 1992 finances. Although the company's net worth dropped by 75% from the $100 million reported earlier in 1992 to $25 million on December 31, 1992, BCBSM did report a $40.8 million profit.

According to the *Baltimore Sun,* BCBSM subsidiaries earned $10 million. Maryland insurance regulators required BCBSM to adhere to strict insurance industry accounting standards—this is one reason for the change in the company's net worth.[3]

March 5, 1993 — The *Baltimore Sun* reports that enrollment for BCBSM-owned HMOs dropped 6% in 1993. Despite this loss, BCBSM HMO revenues increased 5% and profits grew by 160%. The four plans—Columbia, Free State, Potomac Health, and CareFirst—lost approximately 16,000 members.[4]

March 6, 1993 — The *Baltimore Sun* reports that the Health Services Cost Review Commission (HSCRC) learned BCBSM received $20 million from discounted hospital rates it receives for its role as an insurer of "last resort." Because BCBSM offers open enrollment to everyone—including those who cannot get health insurance because they are considered a bad risk—the company receives special benefits, such as a 4% discount on hospital bills. According to HSCRC, BCBSM reported it could not distinguish between the cost of care for those who participated in open enrollment and other subscribers. HSCRC learned, however, that BCBSM separated the costs for these groups in information provided to state insurance regulators. The data showed that only $2 million of the $26 million in hospital bills was incurred by individuals participating in open enrollment during 1991. John M. Colmers, HSCRC executive director, told the *Sun* that his agency will investigate this matter further.[5]

March 9, 1993 — BCBSM announces that its special investigations unit recovered $2.4 million from fraud and abuse probes during 1992, a 50% increase over 1991 recoveries. The unit also recorded more than $1 million in "avoided payments" in 1992. These are payments BCBSM would normally have paid to health care providers or subscribers if the unit had not detected fraud or abuse.

"The dramatic increase in recoveries can be traced to a new emphasis on special studies," said William G. Stephens, director of the BCBSM special investigation unit, in a BCBSM news release. "To conduct a special study, we select a certain medical procedure and determine how often a provider administers the procedure. If the provider's average billing for that procedure far exceeds his or her peers', we investigate." Most of the special studies uncovered cases of abuse, according to Stephen. "Abuse can include instances where a health care provider renders inappropriate or unnecessary service or overcharges for a service. Fraud cases generally involve a higher dollar amount and can include charging for services not rendered, billing for a higher level of service than was rendered, and accepting bribes or kickbacks for referring patients," said Stephens.

March 18, 1993 — BCBSM announces it will discontinue MEDCASH, a health care credit card introduced in 1988. The insurer sold the outstanding balance portfolio to Key Federal Savings Bank. "The sale is another step in our efforts to move the company back to its basic mission of providing health insurance to the people of Maryland," said John A. Piccotto, senior vice president and general counsel for BCBSM, in a company news release.

1. Bowman T. House OKs tighter rules for Blues. *Baltimore Sun* February 24, 1993; 11D & 12D.
2. Wooton S. Blues board revokes retirement supplements. *Baltimore Sun* February 26, 1993; 13D.
3. Meisol P. Md. Blues report lower net worth. *Baltimore Sun* March 2, 1993; 13C & 15C.
4. Meisol P. Blues HMOs enrollees down, profits up. *Baltimore Sun* March 5, 1993; 16C & 23C.
5. Meisol P. Blues reap millions from discounts. *Baltimore Sun* March 6, 1993; 13D & 20D. ■

A Clinical Moment with Diabetes

Foot care for the patient with diabetes

Doctor, I am 58-years old and have had diabetes for two years. I recently saw my orthopaedic foot specialist because of an infection on my toe. He was very concerned about the infection, and warned me that this may lead to amputation of my toe. Is there anything that can be done to prevent this?

Your doctor's concern was quite appropriate. You are certainly at increased risk for infection, and once this becomes established, it tends to be a much more serious problem than in the nondiabetic patient. There are three major factors that contribute to the development of infection in your feet. The first is poor circulation or peripheral arterial disease, the second is neuropathy or a decreased sensation, and the third is an increased susceptibility to infection. All of these factors contribute to an increased risk of ulcers and infection in your feet.

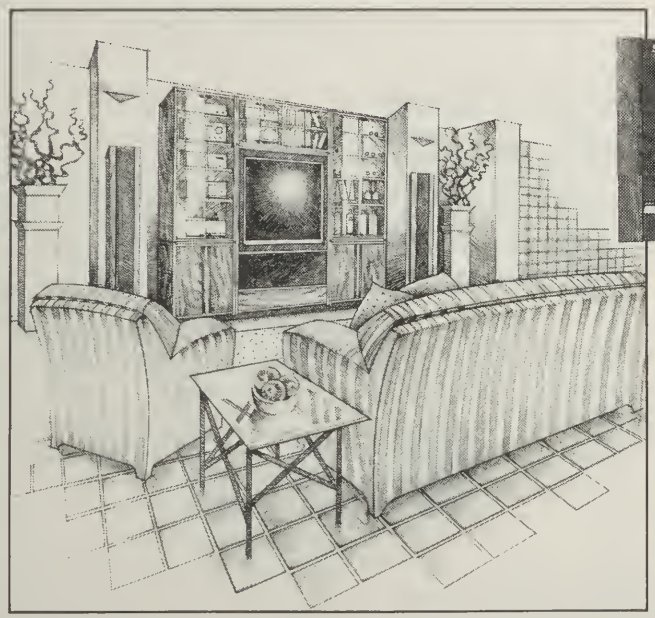
Antibiotics are required for treatment and, depending on the severity of the infection, are administered orally or intravenously. Once the infection is under control, it is essential that you take care of your feet on a daily basis. The infection may begin in what is apparently a trivial crack in the skin, frequently near the nail. It is important to inspect your feet daily; if you are unable to see the bottom of your foot, use a mirror. Due to the neuropathy, the skin loses its texture and moisture. The skin becomes dry and commonly cracks, allowing bacteria to enter resulting in infection. You should, therefore, replace the natural moisture of the foot by soaking the foot daily in warm, *not hot*, water for 15 minutes, followed by rubbing in Vaseline (petroleum jelly) to replace the natural oils of the skin. You should not walk barefoot and must pay attention to shoe wear. Soft inserts or cushions (orthotics) in the shoes will pad the bottom of the foot, preventing ulceration and infection. Surgery may be necessary to correct severe deformity that cannot be controlled with appropriate shoe wear. By careful attention to your feet, you can prevent corns, callouses, and bony prominences from developing into more serious infections. Inspect shoes daily for any nail points, torn linings, or loose and foreign objects. Toenails, corns, and callouses should be given appropriate care by a professional. Seek medical care promptly, even for what appears to be a minor callous or an infected ingrown toenail, to prevent more serious consequences such as amputation.

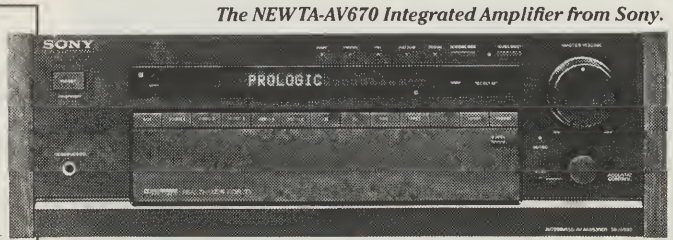
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Imaging Case of the Month

A 79-year-old, African-American male presented with an acute exacerbation of chronic back and leg pain and with an increase in leg weakness. He was afebrile, with a normal hematocrit and white blood cell count. His sedimentation rate was elevated to 47.

Radiographs and a magnetic resonance imaging (MRI) examination of the lumbosacral spine were obtained and followed by surgical decompression and biopsy.



Figure 1.

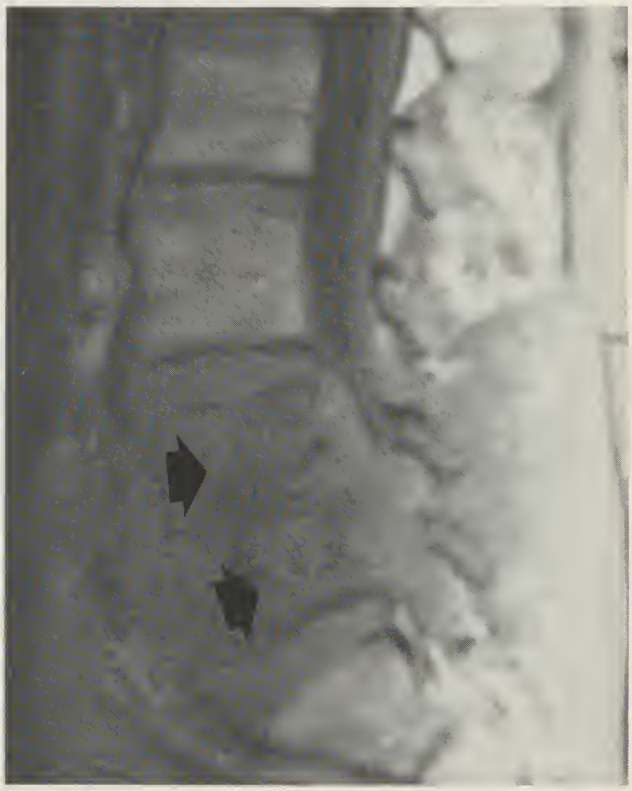


Figure 2.

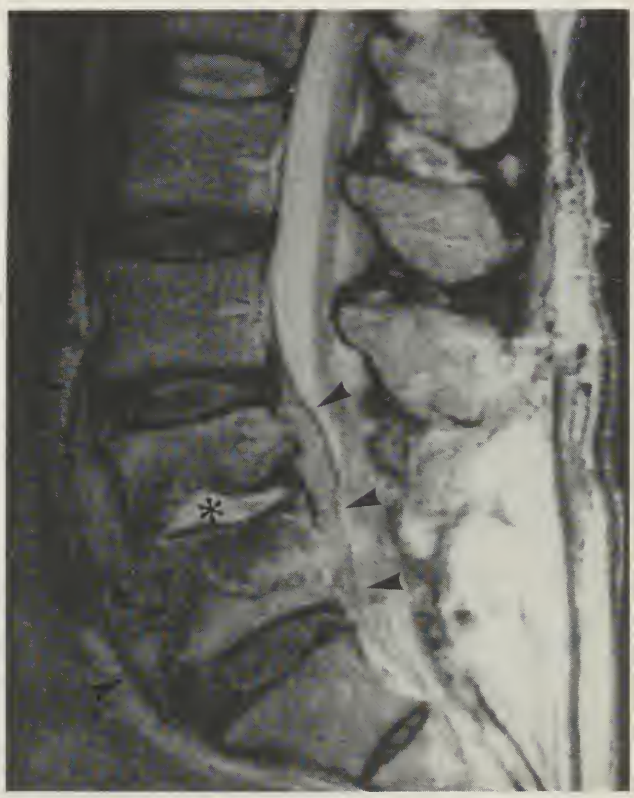


Figure 3.

Imaging Case of the Month

"Imaging Case of the Month" is a regular feature of the *Maryland Medical Journal*. Coordinated by the Maryland Radiological Society, the cases presented provide a review of a broad range of diseases and pathological processes of interest to a wide range of specialists.

Physicians interested in submitting cases for publication consideration should contact the department editor:

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Tuberculous osteomyelitis, discitis, and epidural abscess

Figure 1. A lateral radiograph shows vertebral end plate destruction around the L4/5 disc (arrows) and lysis of the adjacent vertebral bodies, L4 more than L5. Resultant loss of anterior and middle column stability allows for a mild spondylolisthesis.

Figure 2. A sagittal T_1 weighted MRI scan shows loss of normal high signal (white) marrow at L4 and L5, replaced by lower signal inflammatory cells and edema. (arrows)

Figure 3. A sagittal T_2 weighted MRI scan shows a paradoxical high signal in the L4/5 disc (asterisk), a signal characteristic usually found in normally hydrated discs, lacking in degenerated desiccated discs, and returning in the edematous, infected disc. Note the pre-vertebral and intraspinal, ventral extradural abscess (arrowheads) with resultant spinal stenosis and caudal root compression.

The clinical presentation, and the radiographic and MRI findings in this patient are typical of vertebral osteomyelitis and discitis, although not specific for infection with mycobacterium tuberculosis. In both pyogenic and tuberculous spinal infection, hematogenous seeding is most common from sites in the respiratory tract, skin, and genitourinary tract; *Staphylococcus aureus* is the most common bacterial agent. In tuberculosis, the site of original infection may be active or quiescent, as in this patient. The infectious organism spreads from end arterioles in the metaphyseal portion of the vertebral body just beneath the end plate and may spread vertebral body to vertebral body via intermetaphyseal arteries, initially skipping the less vascular disc.[1]

The corresponding radiographic changes often occur slowly, beginning with erosion of the vertebral end plate, followed by bone lysis in the vertebral body itself and by progressive collapse and resultant deformity. The infectious spondylitis is reflected in MRI changes, as well as radionuclide bone scanning with technetium 99m hydroxydiphosphonate; Modic et al report that osteomyelitis appears at approximately the same time on these two modalities.[2] MRI provides additional information about paraspinal and intraspinal extension of abscess and resultant compression of neural structures, and is therefore often preferred to radionuclide bone scanning for evaluation of spinal infection. The typical early MRI changes of discitis and osteomyelitis, decreasing in signal on the T_1 weighted sequence and increasing in signal on the T_2 weighted sequence on either side of a disc with irregular end plates, are not entirely specific and may be confused with the inflammatory stage of osteoarthritis.[1]

This confusion is more likely with tuberculosis because the intervening disc may remain low signal (typical of a degenerated disc) rather than high signal (typical of an infected disc), because of a lack of proteolytic enzymes that would involve and inflame the disc.

Smith et al report that only 25% of patients with tuberculous spondylitis have abnormal signal in the discs on T_2 weighted MRI.[3]

This patient, with more advanced disease and accompanying discitis, is one of the minority of cases with abnormal disc signal. Because tuberculous spondylitis takes longer to develop, vertebral body destruction and deformity may be greater, and larger paraspinal abscesses may develop.[4]

In this patient, decompressive laminectomies of L4 and L5 revealed caseous material that ultimately grew mycobacterium tuberculosis, not present on original acid fast stain. Treatment with INH (isoniazid), rifampin, pyrazinamide, and ethambutol, as well as the surgical decompression, resulted in clinical improvement. The decision for surgery, in addition to antibiotic therapy, rests on the assessment of spinal stability and neural compression.[5]

With the recent increased incidence of the disease, especially in the immunocompromised population, we must remember tuberculous spondylitis and the appropriate imaging modalities and treatment options to effect a cure.

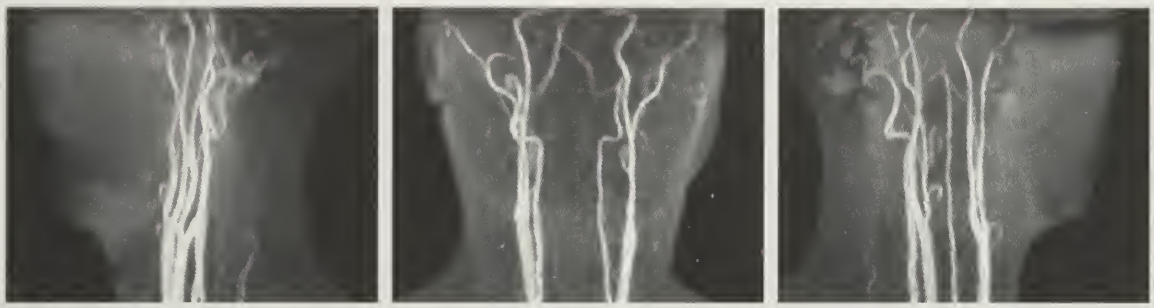
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Treatment of panic disorder: Summary of the NIH consensus statement

Panic disorder with and without agoraphobia is a debilitating disorder that may afflict as many as three million people in the course of a lifetime. It is characterized by panic attacks, which are bursts of terror that seem to come out of the blue. People suffering from a panic attack often think that they are having a heart attack or that they are losing their minds. Secondary to the occurrence of these unexpected panic attacks, panic sufferers often develop agoraphobia and consequently begin to avoid places where they fear a panic attack may recur. If the agoraphobia becomes severe enough, a person may become housebound.

Research gathered in recent years indicates that selected psychopharmacologic and psychosocial treatments are effective in people who have panic disorder, with or without a history of agoraphobic avoidance.

Two classes of antidepressant medications (tricyclics and monamine oxidase inhibitors) and several high potency benzodiazepines (alprazolam, clonazepam, and lorazepam) have been found to be effective, particularly in the short run, in reducing or eliminating panic attacks associated with panic disorder. However, pharmacologic agents may present problems such as undesirable side effects, the risk of dependence, and a significant relapse rate once medications are discontinued.

Research continues on other medications that may prove useful in the treatment of these conditions. Initial indications are that some of these other agents, particularly the serotonin uptake blockers, may be effective panic medications.

Several variations in a cognitive-behavior approach to treatment also have shown significant efficacy in the reduction and/or elimination of panic attacks. Published reports from several research centers indicate that a vast majority of patients are panic-free at the end of a course of cognitive-behavioral treatment, and some data suggest that these benefits last for up to two years after treatment is ended.

Information is sparse or nonexistent on such issues as (1) the effectiveness of combined psychosocial and pharmacologic treatments, (2) the mechanisms of therapeutic action, (3) individual patient factors that may have predictive value in terms of outcome, (4) the long-term effectiveness of treatment for panic disorder, and (5) the effectiveness of treatment for other problems associated with panic disorder and agoraphobia.

To help resolve questions surrounding these issues, the National Institutes of Health (NIH), in conjunction with the National Institute of Mental Health (NIMH), convened a Consensus Development Conference on the Treatment of Panic Disorder on September 25-27, 1991. A consensus panel composed of experts in psychiatry, psychology, cardiology, internal medicine, and scientific methodology, as well as members of the general public, considered the scientific evidence presented by a number of experts in relevant fields. The panel formulated a consensus statement in response to the following five questions:

- What are the epidemiology, natural history, and course of panic disorder with and without agoraphobia? How is it diagnosed?
- What are the current treatments? What are the short-term and long-term effects of acute and extended treatment of this disorder?
- What are the short-term and long-term adverse effects of these treatments? How should they be managed?
- What are considerations for treatment planning?
- What are the significant questions for future research?

The panel concluded that

- panic disorder is a distinct condition, with a specific presentation, course, and family history, for which there are effective pharmacologic and cognitive-behavioral treatments;
- treatment that fails to produce an effect within 6 to 8 weeks should be reassessed;
- panic disorder patients often have one or more existing mental conditions and thus require careful assessment and treatment; and
- the most critical research needs include
  - the development of reliable and valid measures of assessment of panic phenomena,
  - the identification of optimal choices and structuring of treatments designed to meet the varying individual needs of patients, and
  - the implementation of basic research to define the nature of the disorder.

In the consensus statement, the panel alluded to several other research needs, including

- the investigation of treatment-resistent patients,
- the investigation of combined pharmacologic and psychosocial treatments for patients who have panic disorder with and without agoraphobia,
- long-term follow-up studies,
- investigations of the mechanisms and processes of change, and
- treatment studies with panic disorder patients who have coexisting mental disorders.

Finally, the panel recommended that NIMH mount an aggressive educational campaign to increase awareness of panic disorder among clinicians, patients and their families, the media, and the general public. On November 13, 1992, NIMH

launched a three-year panic-education campaign that will include the production and dissemination of print and audiovisual information materials for the lay public, health care professionals, and employers about the symptoms and treatment of panic disorder. NIMH will collaborate with professional societies, mental health organizations, and the media to achieve the goals of the campaign.

Free, single copies of the complete NIH consensus statement on treatment of panic disorder may be ordered from the Office of Medical Applications of Research, National Institutes of Health, Federal Building, Room 618, Bethesda, Maryland 20892 (301-496-1143). ■

Panic disorder: A commentary

Panic disorder is an illness that has only recently been recognized as a distinct disorder. This diagnosis is made exclusively on the clinical presentation. Typically, the patient complains of discrete episodes of intense, unbearable anxiety with associated physical symptoms (palpitation, tremors, chest pain, dizziness) and a fear of dying or going crazy. This may or may not be complicated by agoraphobia, which is an avoidance of places or situations where escape might be difficult should a panic attack begin. Other psychopathology that can be caused by panic disorder and complicate the picture include generalized anxiety, demoralization, depression, and substance abuse. Secondary occupational and social morbidity is also common.

The importance of correct and timely diagnosis is underscored by the fact that panic disorder is quite treatable. The National Institutes of Health (NIH) consensus statement points out that there is solid evidence that three different classes of medications are effective in panic disorder, as is cognitive-behavioral psychotherapy. The medications—tricyclic antidepressants, MAO (monoamine oxidase) inhibitors, and high potency benzodiazepines—each have their particular advantages and disadvantages. The benzodiazepines—alprazolam, lorazepam, and clonazepam—work very rapidly with minimal side effects other than drowsiness. They have the disadvantage of being potentially addicting and are probably better in the short run than the long haul. The tricyclics and MAOIs are easy to dose, have no problems with dependence, and are reliably effective. They have the problem of frequent side effects (anticholinergic symptoms, sexual dysfunction, hypotension) and take two to four weeks to become effective. One useful pharmacological strategy is to begin treatment with a high potency benzodiazepine, then bring a tricyclic on board, tapering the benzodiazepine once the tricyclic has reached therapeutic levels.

The use of cognitive-behavioral psychotherapy to treat panic disorder is well studied. The advantages of this approach are that it is focused, time limited, and cost effective. The major limitation is that any underlying conflicts that may have predisposed to the panic attacks will likely be missed. While the consensus statement does say that psychodynamic psychotherapy "may be helpful for other difficulties the patient presents," the de-emphasis on a psychodynamically informed approach is conspicuous in this report. In our experience, psychodynamic psychotherapy is a useful approach to panic disorder, although this is usually best undertaken after the florid symptomatology is under better control.

As the consensus report emphasizes, education of both doctor and patient is crucial. The primary care doctor needs to recognize this common syndrome because most patients present to the internist or family practitioner. Of course, physical disorders such as cardiac, vestibular, thyroid, or other endocrine disorders (e.g., pheochromocytoma) need to be considered, as do stimulant abuse or alcohol withdrawal. The main problem with the uneducated doctor is that once the physical conditions are ruled out, he or she misses the diagnosis or decides it is "all in the head," "just nerves," or "simply stress." A treatable patient is left to suffer needlessly. The patient also needs to be educated about the illness. Oftentimes, naming and clarifying the condition goes a long way toward reducing secondary anticipatory anxiety and demoralization. A well-educated patient then becomes the best ally in determining an appropriate treatment plan tailored to his or her needs.

Whatever treatment is undertaken, if it is not effective within six to eight weeks, the diagnosis and treatment plan need to be reconsidered. If one of the pharmacological strategies have not been tried at that point, it should be strongly considered. Since a large percentage of patients with panic disorder have a comorbid psychiatric condition, referral to a psychiatrist is usually indicated.

Strategies for further research into panic disorder were outlined in the consensus statement. Of course, we eagerly await the time when we have more definitive data on etiology, pathophysiology, course, and treatment. But now, today, we have a clearly definable clinical syndrome that responds rapidly and robustly to our current treatments. We applaud the NIH in making **education** about panic disorder its first priority in this condition.

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WORD ROUNDS

Bart Gershen, M.D.

Turning points

We inhabit a tilted, whirling globe.

Of course, those of us perched awkwardly on its surface are not aware of this tilt. Careful measurement of earth's north–south axis relative to the sun confirms the incline. We are, in fact, angled some 23.5 degrees from our aging star.

In summer, the northern half of earth slopes toward the sun. In winter, it leans away. On June 21 of every year, the sun hovers directly above the latitude 23.5 degrees north of the equator. It is known as the Tropic of Cancer. Similarly, on December 22, the sun is directly above the Tropic of Capricorn, 23.5 degrees south of the equator.

On that first day of winter, the sun reaches its lowest point in the sky. Thereafter, it begins to rise higher and higher above the horizon. On reaching its summer zenith, the sun begins a slow daily descent, again touching its nadir on December 22.

This annual ritual is repeated inexorably. But a curious phenomenon occurs as the sun reaches the limit of each excursion—winter or summer. It appears to *pause* at that position for a few days before starting to backtrack. This apparent hesitation is known as the summer or winter **solstice.** (From the Latin *sol* 'the sun' and *sistere* 'to pause or stand'—that is, the sun appears to **stand still** above the horizon. Armi**stice** has the same terminal root meaning, "a pause or stoppage of arms"—an archaic term we have little use for today.)

The latitude at which a solstice occurs is known as a **tropic**—the place where the sun "turns" in the sky. (Greek **tropos** 'a turning'—e.g., **phototropic:** turning of plants toward light.) We call the zone that lies between the two turning latitudes (Tropic of Cancer and of Capricorn) "the tropics."

On the first day of fall or spring, the sun will be found directly above the equator—the autumnal and vernal **equinoxes.** Days and nights are each 12-hours long. (Latin *aequus* 'equal' + *nox* 'night').

Ancient astronomers carefully studied the motion of the sun, moon, and five visible planets. They also examined collections of distant stars that they called **constellations** (Latin *con* 'together' + *stella* 'stars'), often imagining them to be animals, such as Ursa Major (the bear), Taurus (the bull), Leo (the lion), and **Cancer** (the crab).

As a term for malignancy, however, **cancer** was first used by Galen. He described a breast tumor this way: "Just as a crab's feet extend from every part of the body, so in this disease the veins are distended, forming a similar figure." The hardness of the tumor advanced the simile, suggesting the crab's shell. (The Greek word for crab, *karkinos,* provides us with **carcinoma.**)

Painful, indurated oral ulcerations, although nonmalignant, were also named for the crab. They were called **cankers.** Furthermore, the French called the hardened primary lesion of syphilis a **chancre** in resemblance to these seashore arthropods. Thus **cancer, canker,** and **chancre** are all rooted in the same crustacean metaphor.

Early astronomers had also noted that **eclipses** of the sun or moon all happened within a very narrow segment of the sky. They referred to this slender band as the **ecliptic.** It corresponds to the annual bouncing ball of sun as it meanders through the heavens. (**Eclipse** from the Greek *ek* 'out' + *leipein* 'to leave'—that is, during an eclipse, the moon or sun is "left out" of the sky.)

Within the ecliptic pathway, 12 constellations were discovered—one for each month of the year. The astronomers named most of these constellations for animals. The collection of 12 was called

the **zodiac** (Greek *zoidion* from *zoion* 'animal'—as in **zoology**—plus *kuklos* 'circle'. Hence, the zodiac is "a circle of animals.")

Return for a moment to the root word *tropos*. Greek mythology speaks of **Atropos**—one of the Three Fates—who, with her macabre sisters Clotho and Lachesis, controls the destiny of every human. Clotho carries a spindle and onto it she spins the thread of life. Lachesis measures and determines its ultimate length. **Atropos** cuts the thread. There is no turning back. (Greek *a* 'not' + *tropos* 'turning'.)

Atropine ($C_{17}H_{23}NO_3$), an alkaloid found in *Atropa belladonna,* is a member of the deadly nightshade family. It is named for the venomous sister **Atropos.** Administered in a sufficient dose, it too will cut the thread of life.

The nightshades are plants within the order ***Solanaceae,*** from the Latin *sol* 'the sun'. This order embraces prominent dietary staples including the Irish potato, the red pepper, and the tomato. Included as well is the tobacco plant and the Jimson weed. The latter plant, *Datura stramonium,* with its companion *Datura meteloides* (the **locoweed**), is frequently responsible for poisoning small children and animals. Jimson was first detected around Jamestown, Virginia, and called Jamestown weed. Through the years, its name has been shortened to Jimson weed. Its leaves, flowers, and seeds contain up to 0.45% belladonna alkaloids, mostly atropine, hyoscyamine, and scopolamine. **Locoweed,** from the Spanish *loco* 'crazy', contains mainly scopolamine.

The toxicity of belladonna plants has been known for centuries. During the period of the Roman Empire and later, in the Middle Ages, they were often exploited for political assassination. Hamlet's father was even said to have been poisoned by a mixture of **Henbane** poured into his ear by brother Claudius. (If you harbor doubts about the efficacy of this method of envenomation, ask yourself what might happen in the event of a ruptured tympanic membrane, and a patent Eustachian tube.)

Henbane is officially known as *Hyoscyamus niger,* and is a chief source of the belladonna alkaloid **hyoscyamine.** (Greek *hyoskyamos* 'pig bean', a reference to its obnoxious odor.) The name **henbane** alludes to its effect on chickens. *Bane* is old English meaning 'deadly poison, the cause of death or ruin'—as in, "it's the **bane** of my existence." **Dogbane** has a similar infsinuation.

All belladonna alkaloids act as anticholinergics and antimuscarinics. **Cholinergic** refers to the neurotransmitter **acetylcholine. Muscarine** is an alkaloid first derived by Schmiedeberg in 1869 from the toxic mushroom *Amanita muscaria. Muscaria* is Latin for 'pertaining to flies'. For years, extracts of the mushroom had been used as a natural pesticide known to kill flies. (Latin *musca* 'fly'. In Spanish: *mosca* from which the diminutive term **mosquito**—"little fly"—derives.)

Acetylcholine is the neurotransmitter released by stimulating pre- and postganglionic fibers of the parasympathetic nervous system. Muscarine duplicates the effect of such stimulation, and atropine inhibits these muscarinic effects. (The nicotinic action of acetylcholine on the somatic motor terminals is not blocked by atropine at usual doses.)

The parasympathetic nervous system includes neural outflow from the midbrain via the nucleus of **Edinger-Westphal** and the oculomotor nerve. (**Ludwig Edinger**, 1833-1918, was a German neurologist who founded comparative neuroanatomy. **Karl Friedrich Otto Westphal,** 1833-1890, was the first professor of neurology appointed in Berlin. He described the nucleus in adults two years after Edinger had initially described it in a fetus.)

In addition, the parasympathetic system includes elements of the 7th (chorda tympani), 9th, and 10th (vagus) nerves. (Latin *vagus* meaning 'wandering', a reference to the meandering, lengthy course of the nerve. Someone who is **vague** also meanders in a discursive, rambling fashion—from the same root.)

Within the intestine, the vagus fibers innervate **Auerbach's** and **Meissner's** plexuses, releasing acetylcholine from their postganglionic terminals. (**Leopold Auerbach,** 1828-1897, was professor of neuropathology in Breslau, Germany. **Georg Meissner,** 1829-1905, was professor of anatomy and physiology at Basle and Gottingen. In addition to describing the submucous plexus in the gut, he also described the touch nerve-endings in the skin, called **Meissner's** corpuscles.)

The parasympathetic system ends with sacral nerves II–IV innervating bladder, rectum, and sexual organs. Atropine blocks the cholinergic-muscarinic effects of this system, with several resultant consequences. As the dose reaches increasingly toxic levels: sinus tachycardia, dryness of the mouth, mydriasis, blurring of vision, difficulty in swallowing, hot and dry skin, ataxia, restlessness, hallucinations, delirium, coma, respiratory arrest, and death.

Classic atropine toxicity may be described as "hot as a hare, blind as a bat, dry as a bone, red as a beet, and mad as a wet hen."

Scopolamine derives from plants of the genus *Scopolia,* named for the Italian botanist **G.A. Scopoli.**

Belladonna (Italian 'beautiful lady') stems from its earliest use as a cosmetic. It guarantees beautiful eyes with very large pupils.

These, too, have been known to be turning points. ■

Book Reviews

All God's Mistakes. Genetic Counseling in a Pediatric Hospital. Charles L. Bosk. Chicago: The University of Chicago Press. 1992. 195 pages. $24.95

Prenatal investigation of parents who may carry defective genes has manifold ramifications for these individuals. A retrospective glance at the specialty of pediatrics illuminates the fact that the lives of countless children have been markedly changed by the medical advances in the diagnosis and treatment of infectious diseases during the last century. As success was achieved in these contagious diseases, the emphasis shifted to genetic disorders and those ailments resulting from the effect of toxic environmental conditions on the developing fetus.

Progress, however, has not been made in these areas without the simultaneous creation of other problems and difficult choices for parents, families, and providers of health information. The subspecialties of neonatology and genetic counseling have been motivated by the specific need to deliver better health care to the contemplated child or fetus. In this process, economic, legal, and ethical anxieties have been encountered.

Birth defects have their origin in faulty chromosomes. Every human cell contains about 6 feet of deoxyribonucleic acids (DNA) or six billion base pairs packed into its 46 chromosomes. Given the amount of coding information passed from each parent to child, the chances for aberration are considerable. These mutations are quite apart from recognized defects in which chromosomal abnormalities are firmly imbedded in the genetic code.

The advertisement on the cover jacket of *All God's Mistakes* states that the author has shaped "a remarkable account of the clinical applications of human genetics in medicine. His finely drawn observations form the basis for an often provocative portrait of the scientific, ethical, and professional conflicts that surround the use of the new technologies of conception and prenatal diagnosis." These statements constitute an ambitious promise. By case use, the author is said to have "revealed the process by which physicians and other health professionals come to make decisions about pregnancies."

Bosk, a professor of sociology, is an ethnologist. The latter term is defined as an individual who studies the division of mankind into races; their origin, distribution, and relations; and the peculiarities that characterize them.

With this background, he was invited in 1976 to witness, over a period of three years, the deliberations of a small group of genetic counselors who were also physicians. Help was afforded by a cytogenetics laboratory that employed amniocentesis and carried out basic research. The report of his preliminary work led to further experience funded by a federal agency. Intense observation lasted until 1978, and then another much shorter period of observation ensued in 1980. All of the information provided by Bosk must be considered in that time frame. The book, however, was not published until 1992.

The modus operandi of the genetic-counseling team consisted of the transfer of pertinent information to requesting individuals. The individuals were then expected and permitted to make their choices about further activity. The counselors acted much in the manner of a supreme court. The judges listened to the evidence, retired to their chambers to deliberate, and then presented their collective, scholarly opinion to the prospective parents. From a bizarre viewpoint, they were intelligent bookmakers who quoted the odds on the appearance of the specific defect or disease under consideration. Then, the parents opted for their course of action. Certainly, difficult de-

cisions by counselors and parents were involved.

Bosk was asked to make an objective assessment of how the group handled its problems. In addition, he was asked to catalogue typical difficulties that could not be solved due to a lack of adequate resources. The work of the counselors was particularly formidable as they could offer only second-trimester abortion, a highly-contested medical and legal procedure, as treatment.

Despite the medical abilities of the consulting group, their universal response to the unsophisticated couple's question of "What should we do now?" was a didactic lecture. The counselors informed the couple that only the couple could know what was right for them to do. Counselors wanted their patients to make their decision after the couple possessed the total available information on the subject. The counselors stressed that these issues were personal, familial, and not for a professional relationship.

Such advice led to a multitude of dilemmas. Couples to whom clear directives could not be given, couples to whom clear direction was proposed but which occasioned intramarital dispute, and couples provided with clear directions but who then chose to ignore the directions, posed three distinct problems. The overriding mandate of the group prevented further help to the patients at this point. The counselors, however, wanted the couples to be comfortable with the information provided and worked to assure themselves that the patients' professed comfort was genuine.

Genetic misadventures are merely mentioned in passing, with little practical information. For the physician or student who wishes to learn the more recent innovations in applied genetics, Bosk offers nothing, and, in retrospect, could not be expected to do so in light of his training. The subtitle of his book, *Genetic Counseling in a Pediatric Hospital*, is totally misleading.

Certainly the health professions are interested in informing the public about current thinking of the intrauterine formation of a child. The present state-of-the-art has made tremendous advances since Bosk gathered notes for his book. Couples desirous of having a child and who may be at risk have a right to know that such is present and how great it is. This information cannot be delivered on a platter, however, and left for consumption and digestion. Somehow, Bosk, not being a medical practitioner, has not acquired that special relationship necessary for good medical practice. These periods of indoctrination are very difficult for the couple, and the couple is worthy of love and support during their trial. The fear of malpractice has pushed the counselors into a defensive type of medicine. If the patients must make the decision about the further conduct of pregnancy, the counselors are free to blame despite the eventual outcome.

This reviewer does not recommend the purchase of *God's Mistakes*. Its advertising prose is totally misleading and the contents do not provide any substantial information about the field of clinical genetics.

JOSEPH M. MILLER, M.D.
Timonium, Maryland

■ ■ ■

Alcoholism. Conspiracy of Silence. Leo P. Hennigan, M.D. Bethesda, Maryland: Gannel Publishers. 1989. 170 pages. $17.95

The author give the reader an autobiographical, blow-by-blow account of his travails and travels through the realm of alcoholism, which lasted about 27 years. He relates his story in plain, matter-of-fact terms using a simple style, and he wonders how a doctor treated by physicians could not have had his problem resolved sooner. The book is a witness to the fact that a hard-core alcoholic can be redeemed, and a satisfactory life recreated.

Leo P. Hennigan, M.D. is well qualified to write this book. After graduating from Georgetown University Medical School, he opted for training in psychiatry and is now a practicing psychiatrist.

The book is an expanded version of his thoughts presented in the *Maryland State Medical Journal* in 1980.[1] The dominant theme of that paper was that Alcoholics Anonymous (AA) offered a way of life as an undeniable substitute for drinking. The underlying therapeutic principle in AA is that one alcoholic helps another after establishing an identity as an alcoholic and relating his/her story. A group of anonymous strangers thus meets to accept and care for the new group member without moralizing, criticizing, or judging. They form a quiet, powerful, and effective therapeutic weapon. The 12 steps that make AA work show the worth of one individual helping another to obtain sobriety.

Unquestionably, the United States is a drinking society, as is evidenced by the great number of places where alcohol may be purchased or consumed. Of the 175 million Americans who use alcohol, about 10 to 13 million are alcoholics, and they constitute the greatest medical and social problem facing our nation. The disease receives little attention in medical schools, and physicians in AA refer to alcoholism as the 4-2-1 disease; in most **four**-year medical schools only about **two** hours of the total curriculum are spent on the number **one** health problem. Of the 85 responses that Hennigan received from medical schools in a study about their alcoholism programs, 10 were judged to have good programs; 25, fair; 43, poor; and 7, too vague to evaluate.

He thinks alcoholism is a disease characterized by denial. He protests the unwritten law of medicine that states, "Thou shalt not diagnose alcoholism un-

til it is in its advanced stages." Frequently, doctors, parents, and spouses fervently deny the presence of alcoholism in an individual with bizarre behavior associated with drinking.

A vast literature has accumulated about the subject, but Hennigan maintains that, despite the fact that it is the number one health problem, most Americans do not appreciate its gravity. He has gathered a fearsome list of statistics (**Table 1**) to illustrate his point.

Table 1. Association of untoward incidents with alcoholism

Incidents	Percentage
Fire deaths	80
Drownings	65
Home accidents	22
Falls	77
Pedestrian accidents	36
Arrests	55
Suicides and homicides	25–33
Divorce and juvenile delinquency	30
Child abuse	90

He makes five promises in his introduction:

1. The reader may easily understand what he writes.
2. Alcoholism is presented from a unique perspective.
3. Answers, not questions, are presented.
4. Alcoholism is not a complicated disease.
5. Every individual, regardless of educational background, may become a member of the therapeutic team to change alcoholism from a devastating health problem to an easily diagnosed and treatable disease.

Curiously, Hennigan believes the following statements about alcoholism to be false:

1. The alcoholic individual cannot be helped unless he or she confesses its presence.
2. The alcoholic individual must desire to stop drinking.
3. Alcoholism is complicated and difficult to treat.

He is, however, not always convincing in defending his beliefs, particularly with regard to the thought that alcoholism is not a complicated disease; this is not generally accepted.

The AA concept that alcoholism is a disease is not universally shared. Some therapists believe that a state of mind should not be confused with the pathologic changes incident to drinking. Modern holistic medicine, however, regards any disturbance of body function as a health disturbance or disease.

Hennigan defines the numerous manifestations of alcoholism in a simple manner. He gives credit to AA for the stabilization of his life and countless others, but he does not relate the specifics of how AA produced these recoveries. The acceptance and use of the 12 traditions of AA are said to be responsible for beneficial therapeutic changes.

The essence of AA supportive treatment is the belief that sobriety can be regained by the recognition of God or a supreme authority as the ultimate guide in human living and that this supreme being's support must be sought continuously in the conduct of life. Having accepted this concept, the flaws of the individual ego and the hurts inflicted upon others must be recognized and corrected. As an anonymous person in an open meeting of AA, the alcoholic individual discusses the problems of character and drinking that led to a loss of sobriety.

Consciously or not, AA has adopted a game plan for therapy paralleling the faith and hope presented by christianity. Recognition of a supreme being is the keystone of almost all religious beliefs. If the alcoholic accepts the premise and recognizes that the flaws of living may be eradicated with sustained hope in a supreme being, a tremendous change occurs. AA claims that 50% of regular attendees stopped drinking within a reasonable period, and that a further 25% did so eventually. This is an extraordinary rate of recovery.

Drug therapy for alcoholism has been fruitless, but such is not true for therapy or its complications. Taking Antabuse (disulfiram) is a threat to the drinking patient and not a means of direct therapy, as its combination with alcohol induces severe nausea and vomiting, but does nothing for the basic craving.

AA states officially that alcoholic individuals are men and women who have lost the ability to control their drinking, and that a true alcoholic individual never regains control but remains in the grip of a progressive disease. Despite the phenomenally high recovery rate attributed to AA activity, the members of the group maintain that alcoholism cannot be cured but only held in abeyance by accepting and using the AA philosophy.

Although Hennigan thought that doctors were negligent in the recognition and treatment of his alcoholism, he must have been elated by the actions of the American Medical Association (AMA) and its subdivisions; by 1984, every state medical society had formed a committee to ensure safe and competent care for alcoholic physicians.

This book will be an excellent addition to the library of the primary care practitioner and those para-medical individuals interested in the treatment of alcoholism. For sufferers from the disease, the book will provide inspiration and help to live with the disorder in a proper way.

JOSEPH M. MILLER, M.D.
Timonium, Maryland

References

1. Hennigan LP. Alcoholics Anonymous: Something of value. *Md State Med J* 1980; 29:65–68. ■

Members in the News



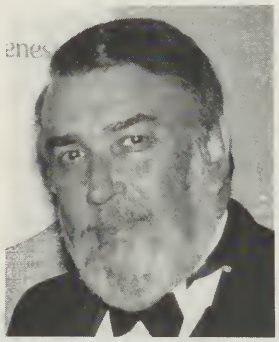
MICHAEL M.E. JOHNS, M.D. has been elected to the Nominating Committee of the American Academy of Otolaryngology—Head and Neck Surgery. He is currently dean of the Johns Hopkins University School of Medicine and vice-president for medical affairs at the Johns Hopkins University. Dr. Johns received his bachelor degree from Wayne State University in Detroit, and his medical degree from the University of Michigan Medical School. He completed an internship and residencies in surgery and otolaryngology in Ann Arbor. Dr. Johns also served in the United States Army Medical Corps as assistant chief of the Otolaryngology Service at Walter Reed Medical Center. He has served on many editorial boards, and has just recently been appointed editor of the *Archives of Otolaryngology—Head and Neck Surgery*. Dr. Johns has also served as member and officer of many professional associations.



STANLEY A. KLATSKY, M.D. has been named director of the new section of cosmetic surgery at the Johns Hopkins School of Medicine. He is presently an assistant professor of plastic surgery at the Johns Hopkins University School of Medicine. He was also recently listed in *The Best Doctors in America*. Dr. Klatsky received his bachelor, graduate, and medical degrees from the University of Maryland. He completed an internship and residency in general surgery at Sinai Hospital in Baltimore, and a residency in plastic surgery at Columbia Presbyterian Medical Center, Presbyterian Hospital in New York. Dr. Klatsky served as a captain in the United States Army Reserve Medical Corps in Texas, and as clinical clerk, Open Heart Surgery, at Walter Reed Army Hospital in Bethesda. He has appointments at many local hospitals and is chief of plastic surgery at Baltimore County General Hospital. Dr. Klatsky is a member of the Baltimore County Medical Association and many other professional societies.



NEIL B. ROSENSHEIN, M.D. has been named director of the newly established Women's Cancer Center at the Johns Hopkins School of Medicine, Department of Gynecology and Obstetrics. A nationally recognized specialist in the treatment of ovarian, cervical, and uterine cancers, he is also currently an associate professor of gynecology and obstetrics, oncology, and epidemiology at the Johns Hopkins University School of Medicine. Dr. Rosenshein received his bachelor degree in chemistry from the University of Florida, and his medical degree from the University of Florida Medical School. He served his internship and residency in gynecology and obstetrics at the Johns Hopkins Hospital. Dr. Rosenshein was a captain in the United States Air Force at Andrews Air Force Base. He is a member of numerous professional organizations including the Baltimore City Medical Society.



SIDNEY SHANKMAN, M.D. was honored as one of the 100 "Real Heros" by the Maxwell House Coffee Company. Founder and executive director of Second Genesis, Inc., he was selected from thousands of nominations in a nationwide search. Dr. Shankman was honored for his heroic efforts in helping save the lives of hundreds of young people and helping to restructure the shattered lives of many hundreds of others. Dr. Shankman is consultant to the White House for National Drug Abuse Policy and also counsels various foreign governments on drug abuse matters. Dr. Shankman received his bachelor degree from the Columbia College, Columbia University, and his medical degree from the University of Tennessee. He also did both undergraduate and postgraduate work at Harvard University. Dr. Shankman, a leading authority on behavioral disorders, has presented before many legal and political groups including international delegations. He is a member of many professional organizations. ■

In Memoriam

Stephen Mackowiak, M.D.

STEPHEN MACKOWIAK, M.D., 81, died February 20 in Guelph, Ontario, Canada, from complications of Parkinson's disease. He was a general practitioner, an army veteran of World War II, and past president of the Maryland Academy of Family Physicians. Born in Baltimore, Dr. Mackowiak graduated from City College, the University of Maryland Pharmacy School, and the University of Maryland School of Medicine. He served his internship and residency at the Emergency Hospital in Washington, DC. Dr. Mackowiak attained the rank of captain and earned a Purple Heart while serving in the Army Medical Corps. He had a practice in the Dundalk, Maryland area for nearly 40 years, was a member of the Baltimore City Medical Society, and a member of the staff of South Baltimore General Hospital.

Ira Weiss Pearlman, M.D.

IRA WEISS PEARLMAN, M.D., a psychiatrist and former pediatrician, died of prostate cancer on January 22 at the age of 71. A native of Washington, DC, Dr. Pearlman was a graduate of George Washington University Medical School. He completed an internship at Gallinger Hospital and residencies in internal medicine, pediatrics, adult psychiatry, and child psychiatry at Suburban, DC General, George Washington, and Children's hospitals. He was a navy veteran of the Korean War. Dr. Pearlman had had a practice in Bethesda since 1954, had been a psychiatrist at the DC government's Family and Child Therapy Clinic for two decades, and had served on the staffs of many local hospitals. He was also on the clinical teaching staff of Georgetown University's medical school. He was a member of the Montgomery County Medical Society.

Jesse L. Wilkins, M.D.

JESSE L. WILKINS, M.D. died Januray 25 at the age of 75. A practicing surgeon in Annapolis from 1951 to 1980, he served as chief of surgery at Anne Arundel Medical Center where he helped establish a formal department of surgery. Born in Rehobeth, Deleware, and raised in Pocomoke City, Dr. Wilkins was a graduate of the University of Maryland and its medical school. He completed an internship at Doctors Hospital in Washington, DC, and then served in the Army Medical Corps during World War II. After the war, Dr. Wilkins completed surgicial residencies at Mercy Hospital in Baltimore and at Veterans Hospital in Huntington, West Virginia. He was a member of the Anne Arundel Medical Society. He also belonged to the Naval Academy Officers Club, Annapolis Rotary Club, Annapolis Yacht Club, Annapolitan Club, and the Military Order of World Wars.

No information was available at press time for the following members:

Jose Ardaiz, M.D. (Baltimore County), February 6, 1993
Ralph W. Ballin, M.D. (Allegany), February 23, 1993
Charles M. Henderson, M.D. (Baltimore), January 28, 1992
Anthony A. Lewandowski, M.D. (Baltimore County), February 21, 1993
M. Elliott Randolph, M.D. (Baltimore), February 16, 1992
Ralph A. Reiter, M.D. (Allegany), February 8, 1993
Benedict Skitarelic, M.D. (Allegany), December 11, 1992
Alfred J. Suraci, M.D. (Prince George's), February 4, 1993 ■

PHYSICIAN PLACEMENT SERVICE

The Medical and Chirurgical Faculty of Maryland maintains a Placement Service for the convenience of Maryland physicians, hospitals, and communities in search of candidates for positions available in our state. A detailed description of such opportunities should be forwarded to:

Physician Placement Service
1211 Cathedral Street
Baltimore, MD 21201
410-539-0872 or 1-800-492-1056

Physicians wishing to locate in Maryland are invited to submit a résumé to be kept on file with the Physician Placement Service. Candidates are requested to inform the Faculty when they are no longer available for consideration for opportunities in Maryland.

MMJ announcements for physician placements in the classified advertisements are charged at the regular classified advertising rate.

Auxiliary

Washington County Auxiliary addresses breast cancer

Brenda Rosenthal, an auxilian who had a personal experience with breast cancer, formed a local affiliate of Y-ME, a national breast cancer organization. With help from the Washington County Medical Society and Auxiliary, the local newspaper, and other community organizations, Y-ME of the Cumberland Valley raised $32,000 to support a project to provide free mammograms for women, a support group for women with breast cancer, and other community projects to promote early detection through breast self-examination and mammograms.

My mother, of blessed memory, always said, "When you get lemons, you make lemonade." In October 1988, I received a bushel of lemons in the form of breast cancer. Like 90% of women, I found the cancer myself, and like at least 75% of women, I did not fit into the normal risk factors category.

During our annual vacation to Hilton Head, I found a lump in my breast. It did not show up on a mammogram and was unable to be aspirated (a test that would indicate a cyst). The physician, however, told me not to worry, so when we returned to Hagerstown I tried not to think about the lump. But my husband, a physician, thought it should be looked at again by a surgeon who is our physician and friend.

Certain events in one's life stand out and are never forgotten. When you ask people where they were when President Kennedy was assassinated, they will tell you in detail where they were. Breast cancer has the same effect on women when they receive the diagnosis. On October 6, 1988, at 4:00 p.m., a very kind, compassionate physician and friend told me I would have a biopsy the next day and to cancel the seminars that were scheduled for the next week. Two years before, I had started a medical management company, Health Claims Services, to provide information, seminars, and management help to physicians and staff to keep up with the changing requirements of Medicare and other insurances. I was in the midst of giving a series of seminars in Hagerstown, Bethesda, Rockville, Cumberland, and Silver Spring when I had the lump examined.

The following weeks are a blur, but it did not look very promising that I would be ringing in the year 1990. The cancer had spread to all of the nodes, and subsequent studies on the tumor indicated an extremely poor prognosis. After the mastectomy and during a course of intensive chemotherapy and radiation, I spent hours weeping. After months of doing this, my husband reminded me of my mother's saying. He asked me when I would take the lemons and start making lemonade.

I enjoy organizing activities, and learned that breast cancer was increasing at an alarming rate and that there was a national breast cancer organization located in Chicago called Y-ME. Thus, I met with a group of interested women to form an affiliate of Y-ME in this area. The mission of Y-ME of the Cumberland Valley is to get the entire tri-state area involved in an early detection and awareness program. A medical advisory board was formed— several surgeons, radiologists, oncologists, and family doctors were helpful in giving suggestions as to the best direction for Y-ME. I became president of Y-ME, and a group of us started involving the entire community in breast cancer awareness projects.

The project is going on its fourth year. In 1992, the Washington County Medical Auxiliary and Y-ME joined forces to make the community aware that physicians and their spouses believe early detection and increased awareness are keys to long-term survival. My being president of Y-ME at its beginnings was a win-win situation for everyone. As a physician's wife, I understand how physicians react to breast cancer, and having lived in the community for 20 years, it was natural to get the entire community involved. As a member of the medical auxiliary, I was aware of how concerned auxilians were about breast cancer. So when the state auxiliary made breast cancer a 1992 project, all the pieces came together.

Thanks to the *Herald-Mail*, the newspaper that serves 42,000 in the tri-state area, over 20 full-page ads listed all Y-ME activities. In October—Breast Cancer Awareness Month—the newspaper ran a full-page ad with signatures of breast cancer survivors, some of whom were only days and others decades from diagnosis. The page made everyone aware that breast cancer does not have to be kept in the closet— that it is only by talking that progress can be made.

Activities were planned for each week in October. A party was held for survivors at which a physician spoke about options after breast cancer diagnosis. The following week, a community seminar was held, "Friends and Family Coping With Breast Cancer," at which Mary Strauss, past president of the Auxiliary to the Medical and Chirurgical Faculty of Maryland and the Auxiliary to the American Medical Association, introduced and set the climate for free-flowing discussion with a physician from Johns Hopkins. Over 70 participants enjoyed a light supper and an informative evening. The third week of October, 99.9% of the physicians in Washington County signed a letter

encouraging all women to perform breast self-examination. This was important because studies have shown that women do not have mammograms because they say their physicians do not suggest it. In this way, we hoped all women would become aware that physicians **do** encourage mammograms.

Every project conducted by Y-ME is done at no cost. It is the belief of Y-ME members that everything we do should be free and open to everyone, no matter what their income level. In addition, Y-ME has an ongoing project with the radiology department at Washington County Hospital to provide free mammograms for income-eligible women. Y-ME pays the hospital a reduced rate, and, to date, over 250 women have taken advantage of the program. Findings of a study in Hagerstown, organized by the Johns Hopkins School of Public Health in Hagerstown, will be published in the near future.

It takes money to organize and implement the many programs of Y-ME of the Cumberland Valley, including a support group for women with breast cancer and a hot line. Each year, Y-ME raises funds by having a Breast Cancer Awareness Month Aerobathon. This past year the goal was $30,000, a very difficult goal to reach in today's economic climate. The Washington County Medical Society and Auxiliary participated and sponsored a team in the "1992 Can-Do Aerobathon," which raised $32,000 (**Figure 1**). Y-ME is proud that physicians, their spouses, and the Washington County Hospital joined forces to push the 1992 goal over the top. This means Y-ME can continue its efforts to encourage all women to practice breast self-examination and to have annual mammograms.



Figure 1. For Breast Cancer Awareness Month, the Washington County Medical Auxiliary Team participated in the Aerobathon sponsored by Y-ME of the Cumberland Valley on October 30, 1992, at Hagerstown Junior College. From left to right are Linda Gray-Jones, Brenda Rosenthal, Agnes Supernavage, and Kim Gabaldoni.

What has been done in Washington County is not unique. Any auxiliary willing to get involved in a project such as Y-ME can achieve the same level of success. In Washington County, planning has already begun for this year's Y-ME activities to reach an even higher goal.

MRS. JOEL ROSENTHAL (BRENDA)
Hagerstown, Maryland ■

■ ■ ■

Auxiliary presents Poole with certificate of appreciation

During the Auxiliary's Day in Annapolis (January 21, 1993), Med Chi's Auxiliary presented Delegate D. Bruce Poole of Washington County with a certificate of appreciation for his work on H.B. 1227 ('92) (**Figure 2**). This bill, which was initiated by a petition signed by more than 150 physicians, created a moratorium on the hazardous waste cement kilns in Washington County. ■



Figure 2. From l to r: Sue Sherwood, state legislative chairperson; Gail Metzner, president of Washington County Auxiliary; Delegate D. Bruce Poole; and Jane Drawbaugh, membership chairperson of Washington County.

American Medical Association
Physicians dedicated to the health of America

For Your Benefit

AMA launches new ad campaign on health system reform

The American Medical Association has launched a series of 13 ads in the Washington, D.C. print media. Its purpose: to position the AMA and its Health Access America reform proposal as a comprehensive plan to contain costs, improve access and maintain quality. The ads portray the AMA as working toward serious reform to bring health insurance access to all Americans.

The campaign began with a full-page ad in the Jan. 20 inaugural edition of the *Washington Post.* That ad set the tone for the campaign by suggesting a "Time for a New Partnership" among physicians, the new administration and a new Congress. The ad series will present the AMA's reform agenda to its key Washington audience in a clear, direct, honest way -- inviting partnership and negotiation.

Each ad offers a copy of the AMA's Health Access America proposal. Eleven issue-focused ads also offer readers a fact sheet on the issue addressed in that ad. The final ad will summarize the AMA's agenda and call again for partnership.

The ads are running approximately once a week until mid-April, except when Congress is not in session. Beginning with the second ad, placement is opposite the federal page in the *Washington Post.* The entire series is also appearing in the *Washington Post's* national weekly edition, read by opinion leaders nationally. In addition, the first ad ran in the new Congress issues of *Roll Call* and *Congressional Quarterly,* and in *Roll Call's* special edition on health care policy.

Bush signs changes in CLIA regulations

In his final week in office, President Bush gave his approval to a new waived category for physician-performed tests under the Clinical Laboratory Improvement Amendments. The AMA and a coalition of medical specialty societies had urged the President to authorize the new regulations, which also had been backed by outgoing HHS Secretary Louis Sullivan, MD.

The AMA already has stated its intent to work with the Clinton Administration to develop additional improvements to CLIA, but also stated that the changes represented a significant first step toward improving the measure.

Prepared by the Department of Communications Services. For information, call 800 AMA-3211, ext. 4416.

AMA offers coverage to students, residents

Medical students and residents can now participate in a comprehensive insurance program through the AMA Insurance Agency Inc. The new MedPlus Advantage program offers three policies: life insurance up to $50,000; portable disability income of up to $2,500 per month, which students can carry from medical school to residency; and $2 million comprehensive major medical coverage for students and their dependents. Optional maternity coverage is also available.

To be sure the program met students' needs, MedPlus got input from AMA student members on what they wanted in a benefit plan. MedPlus recognizes the special insurance risks of students and residents; it even offers a rider covering up to $100,000 of educational debt if a student becomes totally and permanently disabled.

Acceptance in MedPlus is guaranteed to all enrolled students, regardless of their health status, and is available on a group basis through participating schools. AMA Insurance Agency Inc. is a wholly owned subsidiary of AMA, providing insurance for physicians and medical students and their families.

Now available: AMA Guidelines for Adolescent Preventive Services

Adolescence is a time of great change. It is the time we expect our children to grow -- physically and emotionally -- into adults. With this tremendous growth often comes a rapid increase in behaviors that put an adolescent's health at risk. Unsafe sexual behavior or experimentation with drugs are just two ways teens may expose themselves to health risks.

In the past, health issues facing adolescents have been dealt with piecemeal. However, ensuring a healthy transition into adulthood requires that these issues be viewed as a whole, with traditional physical and psychosocial development and contemporary health problems addressed together.

To help primary care providers do this, the AMA has just developed *Guidelines for Adolescent Preventive Services* (GAPS) -- a set of recommendations for delivering a *package* of adolescent clinical preventive services.

You can request a copy of the GAPS guidelines by calling the AMA Department of Adolescent Health at 800 AMA-3211, ext. 5570.

Prepared by the Department of Communications Services. For information, call 800 AMA-3211, ext. 4416.

William Donald Schaefer - Governor of Maryland

DHMH Maryland Department of Health & Mental Hygiene

Nelson J. Sabatini - Secretary
Department of Health & Mental Hygiene

J. Mehsen Joseph, PhD - Director
Community Health Surveillance & Laboratories Admin.

Ebenezer Israel, MD, MPH- Director
Epidemiology & Disease Control Program

EPIDEMIOLOGY & DISEASE CONTROL PROGRAM
201 W. Preston Street, Baltimore, Maryland 21201 (410)225-6700

MARCH, 1993
Tips for Vaccine Administration

Because of the increasing number of recommended vaccines, the Epidemiology and Disease Control Program compiled the following information to assist health care providers with vaccine administration, management, and handling techniques. Although the individual package inserts, ACIP statements, and Red Book of the AAP contain more detailed information, these tables were designed to simplify the immunization process and answer some commonly asked questions. Table 1 contains helpful suggestions for giving intramuscular (IM), subcutaneous (SC), intradermal (ID), and oral vaccines. Following a schedule where immunizations are given simultaneously instead of spreading immunizations out over several visits can lessen barriers that affect parents (transportation, cost of additional office visits, time off from work) and will improve immunization rates. Table 2 provides an order of administration which is helpful when giving multiple vaccines to one patient. Table 3 outlines basic vaccine storage and handling techniques essential to any vaccine management program. The figures show appropriate administration sites.

Table 1. **Recommendations for vaccinations by route of administration**

	IM	SC	ID	Oral
Vaccine(s)*	DTP, DTaP, DT, Td, Tetanus(adsorbed), Hib, Influenza, HBV, Rabies, Pneumococcal	MMR, eIPV, Pneumococcal	PPD Mantoux, Rabies(pre-exposure), Typhoid fever (injectable)	OPV Oral typhoid fever
Sites	Arm: deltoid muscle Leg: vastus lateralis	Outer aspect of upper arm or fatty area of anterior lateral aspect of thigh	Inner forearm	By mouth
Insertion angle	90° (perpendicular)	45°	5° to 15°	
Needle size	1", 22 or 23 gauge; ⅝", 25 gauge may be used if long enough to reach the substance of the muscle in infants	⅝", 25 gauge	½" or ⅝", 25 or 27 gauge	

* Abbreviations: Diphtheria-pediatric (D), Tetanus (T), Pertussis (P), Acellular Pertussis (aP), diphtheria-adult (d), Haemophilus influenzae type b (Hib), Hepatitis B (HBV), Measles Mumps Rubella (MMR), Purified Protein Derivative (PPD), Oral Polio (OPV), Enhanced Inactivated Polio (eIPV)

Table 2. **Order and site of administration when giving multiple vaccines to children**

0 to 14 months		15 months or older	
OPV	oral	OPV	oral
DTP/DT	IM-vastus lateralis	DTP/DTaP/DT	IM-vastus lateralis, or deltoid based on size of muscle
Hib	IM-vastus lateralis of other leg	Hib	IM-vastus lateralis of other leg, or deltoid
HBV	IM-vastus lateralis of same leg as Hib, ≥1" apart; or IM-deltoid if ≥12mo & sufficient muscle mass	HBV	IM-deltoid-if sufficient muscle mass
		MMR	SC-outer upper arm

Table 3. **Tips for vaccine handling and administration**

Oral Polio (OPV)	Maintain continuously in the frozen state Store at -14°C (7°F) or lower	Remove from freezer just before using Rub tube between palms to thaw Squeeze entire tube in child's mouth Push up on child's chin to make sure content is swallowed
DTP/DT/ DTaP/Td	Store at 2°-8°C (35°-46°F) Do not freeze	Shake vial Examine for color, cloudy suspension; should be milky but not clumped Insert needle deep into muscle; may pinch muscle to lift from bone and to increase muscle depth, if necessary
MMR	Store vaccine at 2°-8°C (35°-46°F) Do not freeze Protect from light at all times Store diluent at 15°-30°C (59°-86°F) (room temp.)	Reconstitute just before use Never let it sit, be warmed, or exposed to light Pinch up superficial tissue above muscle to insert into fatty subcutaneous tissue
Hib	Store at 2°-8°C (35°-46°F) Do not freeze	Examine for color, clear suspension before drawing up dose; should be clear, colorless
HBV	Store at 2°-8°C (35°-46°F) Do not freeze	Shake vial vigorously before drawing up dose; should be clear, colorless
eIPV	Store at 2°-8°C (35°-46°F) Do not freeze	Supplied in ampules, pre-filled syringes, and multi-dose vials Refer to package insert for administration instructions Examine for color, clear suspension; should be clear, colorless

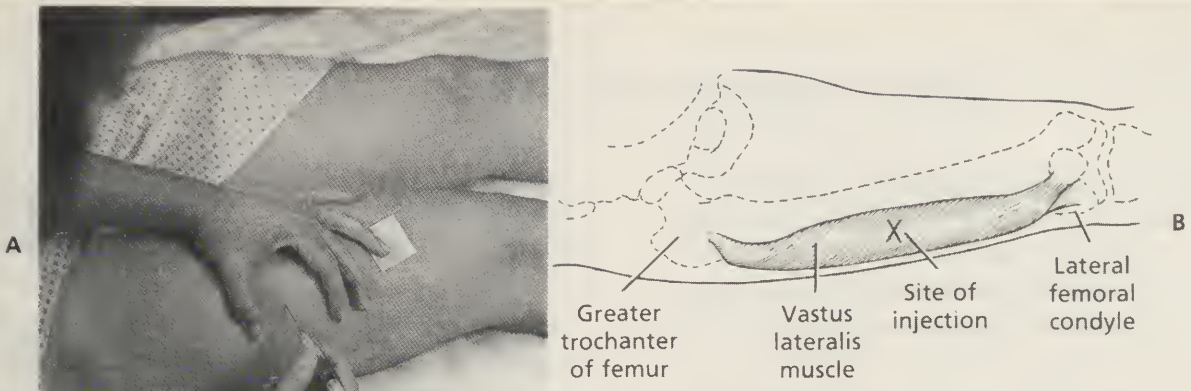


Fig. 1 A. Injection site into the vastus lateralis muscle. B. Anatomic view of site for intramuscular injection into vastus lateralis muscle.

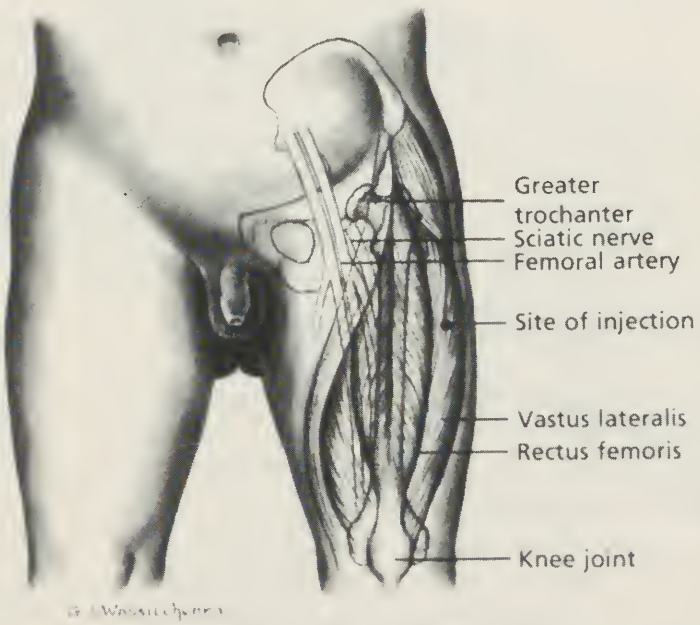


Fig. 2 Acceptable intramuscular site for children, the vastus lateralis.

From Whaley, L.F., and Wong, D.L.: Nursing Care of Infants and Children, ed. 4, St. Louis, 1991, Mosby Year Book, Inc.

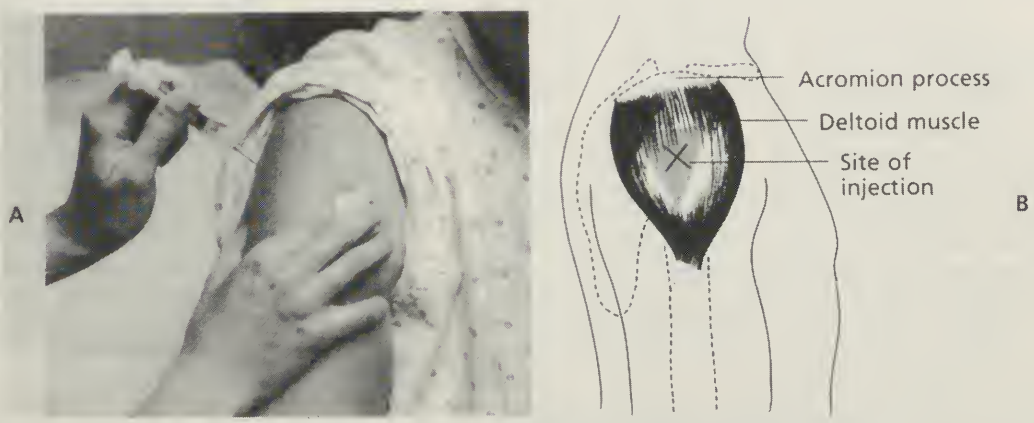


Fig. 3 A. Site of intramuscular injection into deltoid muscle. B. Site of deltoid muscle below acromion process.

Illustrations from Perry, Anne G., and Potter, Patricia A.: Clinical Nursing Skills and Techniques, ed. 2, St. Louis, 1990, The C.V. Mosby Co. Reproduced with permission.

Update: Shigella in Day Care Centers

Cases of reported shigellosis increased in Maryland in 1992. Figure 1 shows the number of cases of shigellosis reported to the Maryland Department of Health and Mental Hygiene from 1982 to 1992. A total of 446 cases were reported

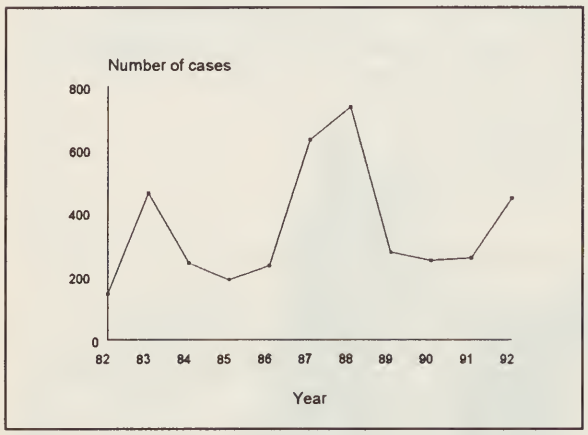


Figure 1. Shigellosis reported in Maryland, 1982-1992

in 1992 (preliminary figures), representing a 73% increase over the 258 cases reported in 1991. Of the 446 cases reported in 1992, 190 (43%) were in children 6 years of age or younger.

Reports of shigellosis outbreaks are also increasing. Between July 1992 and February 28, 1993, nine outbreaks have been reported, all occurring in settings involving the care of young children. Figure 2 portrays the outbreaks reported in Maryland from 1986 to the present with the corresponding number of outbreaks which occurred in child care settings. In 1992, 103 cases of shigellosis were associated with the 7 outbreaks in child care settings (i.e., the patients had diarrhea and/or had a positive culture for *Shigella*); 41 (40%) of these cases had *Shigella* recovered from a stool culture. These figures contrast with 1991 figures, where none of the 3 reported outbreaks occurred in child care settings.

The infection can be asymptomatic or present with watery diarrhea or loose stools which may be mixed with blood and mucus, abdominal cramps, and fever. Antibiotics shorten the duration and severity of illness and the duration of pathogen excretion, and should be used if warranted by the situation. Foodhandlers, child care attendants, and child care or health care workers with shigellosis must be excluded until fecal cultures are negative.

Day care centers are an important setting of transmission of diarrheal diseases, including shigellosis. Not only are children and staff at risk of infection, but parents, siblings, and others in close contact such as playmates, are also at risk. Prevention and control measures in child care settings rely on maintaining high levels of hygienic practices, excluding children with diarrhea, keeping a list of ill children and their symptoms, and educating children and employees involved with child care about handwashing, cleanliness, and infection control.

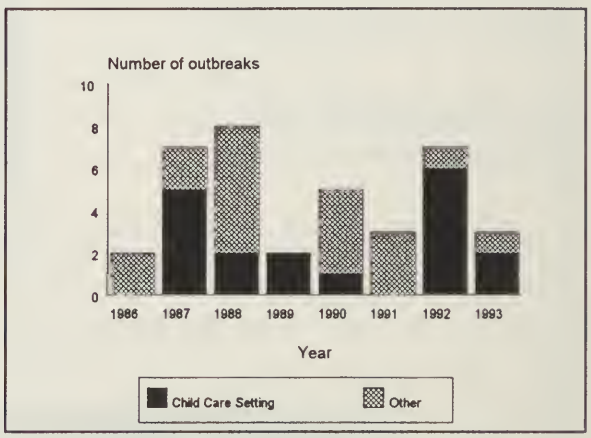


Figure 2. Shigellosis outbreaks reported in Maryland, 1986-1993 (as of February 28, 1993)

Shigellosis cases (suspected or confirmed) and outbreaks are reportable to your local health department. Upon receipt of a report, the health department can assist you and child care facilities in the management of the cases and contacts according to the Maryland communicable disease regulations.

The Maryland Medical Journal (MMJ) *is a monthly publication of the Medical and Chirurgical Faculty of Maryland. The journal's goals are educational and informative: the publishing of scientific articles (original research, case studies, and review articles) and other technical information, as well as editorials, letters, special articles (evaluations, position papers, reviews of nonscientific subjects), membership and legislative news, continuing medical education notices, and programs and policies of the faculty.*

Information for AUTHORS

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  The letter should include a statement to the effect that all authors have participated in the conception and design of the work and in the writing of the manuscript, and that they take public responsibility for it. The authors should attest to the validity and legitimacy of the data, and acknowledge that they have reviewed the final version of the manuscript and approve it for publication.

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- ***Manuscript preparation***—Manuscripts should be submitted to Editor, *MMJ*, 1211 Cathedral Street, Baltimore, MD 21201-5585. Manuscripts must be original material not previously published and not under consideration by another publication. An abstract of 100 to 300 words is required.

  All material, including references, tables, and legends, must be double-spaced. Pages should be numbered. (All abbreviations should be spelled out on first use.) The original manuscript plus one copy should be submitted on standard (8.5" x 11") bond paper. If at all possible, an IBM-compatible disk should be included, with the manuscript entered in a WordPerfect, Multimate, Wordstar, or ASCII format; the transmittal letter should identify the format used.

- ***References***—References are limited to those citations noted in the text. References should be numbered consecutively as they appear in the text and should be kept to a minimum (fewer than thirty-five). Personal communications and unpublished data are not acceptable. At a minimum, references should include names of all authors, complete title of the article cited, name of journal abbreviated according to *Index Medicus* (if abbreviation is not known, journal name should be spelled out fully), year of publication, volume number, and first and last page numbers. Sample references are as follows:

  1. Stevens MB. The clinical spectrum of SLE. Md Med J 1991; 10:875–85.
  2. Ropes MW. Characteristics, manifestations, and pathologic findings. In: Ropes MD, ed. Systemic Lupus Erythematosus. Cambridge, MA: Harvard University Press. 1976; 50–4.

- ***Tables***—Tables should be typed on separate sheets of paper, be numbered, and have a brief descriptive title. Data presented in tables should be self-explanatory and should supplement, not duplicate, the text; the Editor reserves the right to edit tables. Authors should be sure that statistics are consistent in both tables and text.

- ***Illustrations***—Illustrations include material that cannot be set in type. Photographic material must be submitted as high-contrast, glossy prints. Drawings and graphs must be done professionally in india ink on high-grade white drawing paper or be computer generated. Identification—including figure number, the title of manuscript, the name of corresponding author, and arrow indicating top—should be typed on a gummed label and affixed to the back of each illustration. Legends for illustrations should be typed on a separate page with numbers corresponding to those on the photographs or drawings. Recognizable photographs of patients are to be masked and should carry with them written permission for publication. Cost of printing color photographs must be borne by the author.

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Checklist

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- ☐ Abstract of 100 to 300 words.
- ☐ Permission-to-borrow letters for any previously published illustrations or tables

University of Maryland

For each course, additional information may be obtained by contacting the Program of Continuing Education, University of Maryland School of Medicine, Room 14-011, BRB, 655 W. Baltimore St., Baltimore, MD 21201 (410-328-3956) or by calling the phone number listed after a specific program. FAX 410-328-3103.

R. Adams Cowley 15th national trauma symposium, sponsored by the Maryland Institute for Emergency Medical Services Systems, at the Hyatt Regency Baltimore, in Baltimore, MD. Info: Office of International Development, 410-328-2399. **Mar. 12–14**

Infectious diseases in everyday medicine - 3rd annual symposium, at the Baltimore Convention Center, Baltimore, MD. 12.75 Cat 1 AMA/PRA credits. Info: Eunice Katz, 410-706-7560. **Apr. 19–20**

Continuously throughout the year

Visiting professor program. A directory of speakers and their topics is available to area hospitals and other health care organizations. NO administrative fees are charged for this service. Info: 410-328-3956.

Visiting fellowship in interventional radiology. Five-day practicum for radiologists, including conferences, patient rounds, and laboratory observations. By appointment only. 40 Cat 1 AMA/PRA credits. Fee: $1,200.

Ultrasound: Preceptorships. For physicians or sonographers with six-months' experience in practicing ultrasound. By appointment only. 40 Cat 1 AMA/PRA credits. Fee: $500.

Departmental rounds and conferences. Weekly, hands-on, and lecture presentations hosted by the university's clinical departments. Hour-for-hour Cat 1 AMA/PRA credits available. Brochure available.

Pediatric grand rounds. Every Thursday from September to June, except third Thursday, in the R. Adams Cowley Shock Trauma Auditorium. Info: Bonnie Winters, 410-328-6777.

Miscellaneous meetings

33rd annual diabetes conference sponsored by the American Diabetes Association at the Baltimore Convention Center. Info: 1-800-232-3662. **Mar. 27**

Headache in the decade of the brain symposium, presented by the Comprehensive Headache Center, at the Germantown Hospital and Medical Center in Philadelphia, PA. 6 Cat 1 AMA/PRA credits. Info: 215-951-8926. **Mar. 27**

Laboratory workshop in breast reconstruction, at the Sentara Norfolk General Hospital, Norfolk, VA. Info: 804-446-6140. **Mar. 25–27**

Hands-on workshop on advanced diagnostic methods in andrology, at the Jones Institute of Reproductive Medicine, Norfolk, VA. Info: 804-446-6140. **Apr. 8–9**

Thrombolysis: its role in peripheral, arterial, and venous disorders, at the Omni International Hotel, Norfolk, VA. Info: 804-446-6140. **Apr. 23**

New trends in gastroenterology and liver disease II, sponsored by the Greater Baltimore Medical Center, 9.5 Cat 1 AMA/PRA credits. Info: 410-828-2688. **Apr. 23–24**

Healing through loss I, sponsored by the Steven Daniel Jeffreys Foundation, Howard Community College, and Howard County General Hospital, 10 Cat 1 AMA/PRA credits. Fee: $150. Info: Dr. J. Shep Jeffreys, 410-992-4166. **Apr. 23 and 30**

195th annual meeting of the Medical and Chirurgical Faculty of Maryland, at the University of Maryland Center of Adult Education, College Park, MD. Info: Betsy Newman, 410-539-0872 or 1-800-492-1056. **Apr. 29 – May 1**

Practical aspects of forensic medicine, sponsored by the Baltimore City Medical Society, at the Montebello Rehabilitation Hospital, Baltimore, MD. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. **May 6**

Miscellaneous meetings (continued)

9th national conference on prescription medicine: information and education, sponsored by the National Council on Patient Information and Education, at the Washington Hilton and Towers, Washington, DC. Info: Rachael Carter, 202-347-6711. **May 6–7**

Practical dermatology for the primary care physician, at the Ritz-Carlton Hotel, Pentagon City, VA. Info: 804-446-6140. **May 6–9**

Virginia Society of Otolaryngology-HNS annual meeting, at the Tides Inn Resort, Irvington, VA. Info: Donna Scott, 804-353-2721. **May 7–8**

Clinical auscultation of the heart, sponsored by the American College of Cardiology, at the Georgetown University Medical Center, Washington, DC. 18 Cat 1 AMA/PRA credits. Info: 800-257-4739. **May 12–14**

Central Atlantic seminar in anesthesiology, sponsored by the George Washington University Medical Center, in Washington, DC. Info: John F. Vargo, 202-994-4285. **May 13–16**

Maryland Academy of Family Physicians 45th annual meeting and scientific session, at the Princess Royale Oceanfront Hotel and Conference Center, Ocean City, MD. 41.25 Cat 1 AMA/PRA credits; 41.25 AAFP prescribed hours. Fee: $240 members; $275 nonmembers; 135 paramedicals; No charge for residents, medical students, MAFP retired and life members. Info: Francis C. Bruno, M.D., 410-747-1980. **May 18–23**

6th annual trauma anesthesia and critical care symposium, sponsored by the International Trauma Anesthesia and Critical Care Society (ITACCS) and Multinational Academic Consortium, at the Hyatt Regency, Baltimore, MD. Info: Kimberly C.A. Unitas, 410-328-2399. **May 20–22**

Virginia Society of Ophthalmology annual meeting, at the Norfolk Marriott Waterside, Norfolk, VA. Info: Donna Scott, 804-353-2721. **May 21–22**

Death and dying: The physician's trials and tribulations, sponsored by the Baltimore City Medical Society. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. **June 3**

Systemic lupus erythematosus update for primary care physicians, sponsored by the Maryland Lupus Foundation and the University of Maryland School of Medicine. 5 Cat 1 AMA/PRA credits; 5 AAFP prescribed hours. Fee: $75.00. Info: 410-337-9000. **June 5**

9th annual Eastern Virginia Medical School family medicine review course, at the Cavalier Hotel, Virginia Beach, VA. Info: 804-446-6140. **June 6–11**

Substance abuse education for primary care physicians: An overview of treating the substance abusing patient, sponsored by the Medical and Chirurgical Faculty of Maryland, at the Mercy Medical Center, McCauly Conference Rooms. 1 Cat 1 AMA/PRA credit; 1 AAFP prescribed hour. Fee: none. Info: Carmine M. Valente, Ph.D., 410-539-0872 or 1-800-492-1056. **June 9**

Board review in family practice, sponsored by the George Washington University Medical Center, in Arlington, VA. Info: John F. Vargo, 202-994-4285. **June 12–16**

INMEDs fourth annual millennium conference, sponsored by the International Medical Services for Health (INMED) and the Tulane University School of Public Health and Tropical Medicine, Sheraton City Centre Hotel, Washington, DC. Info: 703-444-4477. **June 15–18**

11th summer symposium in internal medicine, at the Fort Magruder Inn & Conference Center, Williamsburg, VA. Info: 804-446-6140. **June 25–27**

16th annual flap dissection workshop, at the Virginia Beach Conference Center., Virginia Beach, VA. Info: 804-446-6140. **July 6–10**

Imaging the augmented breast, sponsored by the Baltimore City Medical Society. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. **Sept. 2**

14th international congress of lymphology, sponsored by the International Society of Lymphology (ISL). Part 1: "Frontiers in Lymphology" at the Hyatt Regency, Baltimore, MD. Part 2: "Lymphology in 1993" at the Ramada Renaissance Techworld, Washington, DC. Info: Grace Wagner, Program Coordinator, 602-626-6118. **Sept. 20–26**

Causes of the medical malpractice crisis, sponsored by the Baltimore City Medical Society. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. **Oct. 7**

Miscellaneous meetings (continued)

Continuously throughout the year

Fluorescein angiography conference, sponsored by the Retina Center, St. Joseph Hospital, Baltimore, MD, first and third Mondays of each month; 8:00-9:00 a.m. Fee: none. Info: R. Classon, 410-337-4500.

Substance abuse education for primary care physicians: An overview of treating the substance-abusing patient. Through August 1993, this Med Chi-sponsored program can be delivered to your staff in a one- to three-hour format at the Med Chi building or any other Baltimore City location. There is no charge for this service. AMA/PRA credits and AAFP hours available. For information, contact Sandra Heim at 410-539-0872.

Shady Grove Adventist Hospital

9901 Medical Center Drive, Rockville, MD. Info: 301-279-6115.

Teens, sex, contraception, and STDs	**Apr. 1**
Advances in reproductive technology	**Apr. 8**
Parasitosis	**Apr. 15**
Tumor board conference	**Apr. 22**
Long-term problems after repair of congential heart disease	**May 6**
TMJ pain; fact or fiction	**May 13**
The vascular surgeon and the diabetic foot	**May 20**
Tumor board conference	**May 27**

The Johns Hopkins Medical Institutions

All courses at the Thomas B. Turner Building unless otherwise indicated. For information on continuing medical education activities, contact the Office of Continuing Education, 720 Rutland Ave., Baltimore, MD 21205 (410-955-2959).

Biological response to orthopaedic implants, at the Marriott Inner Harbor Hotel, Baltimore, MD. Cat 1 AMA/PRA credits available. Fee: $200 physicians; $125 residents and fellows. **Mar. 19–20**

Problems in the diagnosis and management of the dysphagic patient: Transatlantic perspectives, at the Stouffer Harborplace Hotel, Baltimore, MD. Cat 1 AMA/PRA credits available. Fee: $425 physicians; $245 residents and allied health professionals. **Mar. 29–30**

Diagnosis and treatment of neoplastic disorders, medical surgical, and radiotherapeutic aspects. 14.5 Cat 1 AMA/PRA credits. **Apr. 1–2**

Current concepts in thyroid disease: Update 1993. Cat 1 AMA/PRA credits available. Fee: $150 physicians; $40 residents and fellows. **Apr. 16**

20th annual pediatric trends. 45 Cat 1 AMA/PRA credits. Fee: $625 physicians; $375 residents and fellows. **Apr. 19–24**

34th annual postgraduate institute for pathologists in clinical cytopathology. Course A: Home study, March-April 1993. Course B: Lecture series with laboratory studies. 140 Cat 1 AMA/PRA credits. **Apr. 19–30**

Clinical care of the patient with HIV infection, at the Stouffer Harborplace Hotel, Baltimore, MD. 13 Cat 1 AMA/PRA credits; 12.75 AAFP credits. Fee: $325 physicians; $165 residents, fellows and allied health professionals. **Apr. 22–23**

Principles and practice of clinical MRI, at the Stouffer Harborplace Hotel, Baltimore, MD. Cat 1 AMA/PRA credits available. **Apr. 22–25**

XII international papillomavirus workshop, at the Hyatt Regency Hotel, Baltimore, MD. 30 Cat 1 AMA/PRA credits. Fee: $400 prior to June 30, 1993; $450 after June 30, 1993. Info: Gretchen Shelton, 410-931-8108. **Apr. 22-25**

The Johns Hopkins Medical Institutions (continued)

Pediatric allergy and immunology for the practitioner. Cat 1 AMA/PRA credits available. **May 6–7**

New frontiers in atherosclerosis and lipoprotein metabolism. Cat 1 AMA/PRA credits available. Fee: $200. **May 13–14**

6th summer institute in environmental health studies. Info: Dr. Jacqueline Corn or Linda Lamb, 410-955-2609. **June 7–18**

Control of biohazards in the research laboratory, at the Hampton House Auditorium. Info: Dr. Jacqueline Corn or Linda Lamb, 410-955-2609. **June 21–25**

Coordination and monitoring of clinical trials. Cat 1 AMA/PRA credits available. **July 8–9**

Continuously throughout the year

Visiting preceptorship in pediatric critical care medicine. Ongoing five-day preceptorship by appointment. 40 Cat 1 AMA/PRA credits. Fee: $600.

The department of radiology and radiological sciences offers several courses in abdominal and obstetrical ultrasound. Info: P. Williams, 410-955-3169.

Visiting physicians. Offered throughout the year for experience in the lab and participation in read-in sessions; by appointment only. 40 Cat 1 AMA/PRA credits. Fee: $500.

Johns Hopkins medical grand rounds. Accredited audiovisual continuing education series of case discussions for clinicians; 30 topics per year in five bimonthly programs. Individual and group subscriptions. 40 Cat 1 AMA/PRA credits. Info: 410-955-3988.

PHYSICIAN'S RECOGNITION AWARD

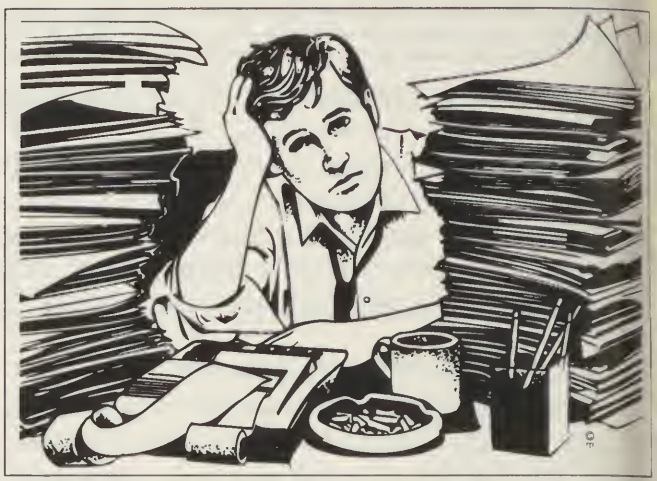
During January 1993, the physicians listed below received the American Medical Association's (AMA's) Physician's Recognition Award. Established in 1968, the award's purpose is to encourage physician participation in continuing medical education and to recognize those physicians who have voluntarily completed programs of continuing medical education.

Arthur Baitch
Amir Seyfeddin Banisar
Eugene S. Bereston
Richard Saul Epstein
M. Richard Fragala
Abolghassem Gohari
Geoffrey Edward Greene
Martin Yehia Heshmat
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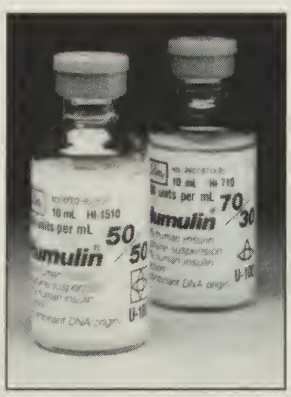
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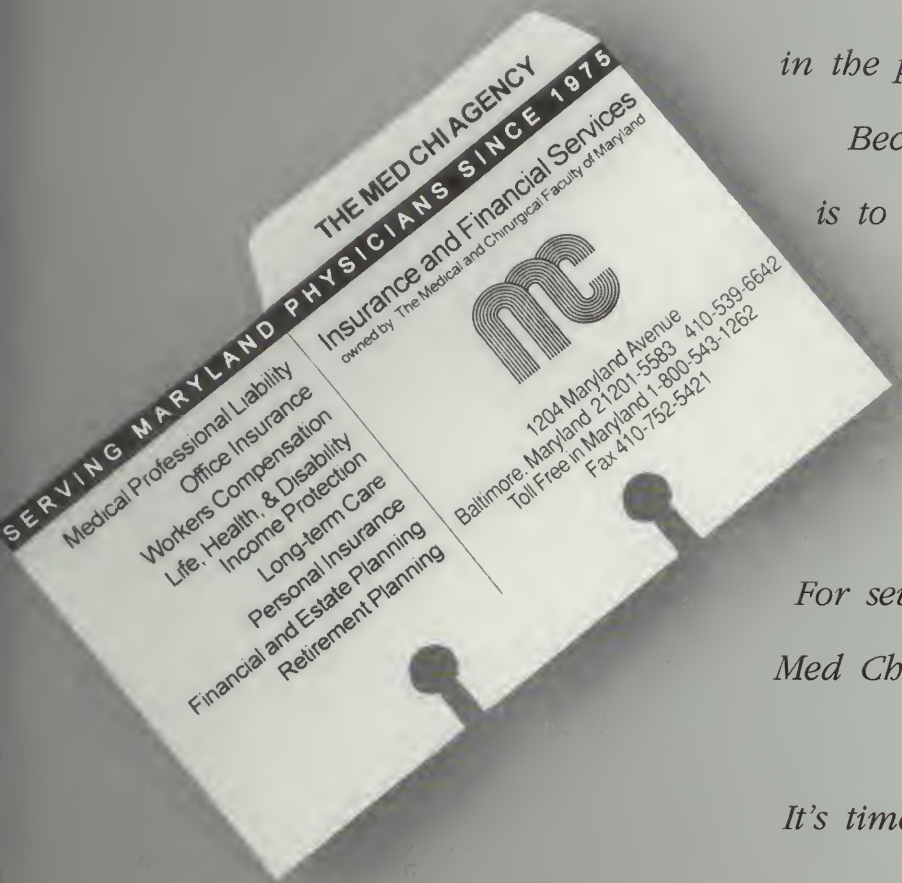
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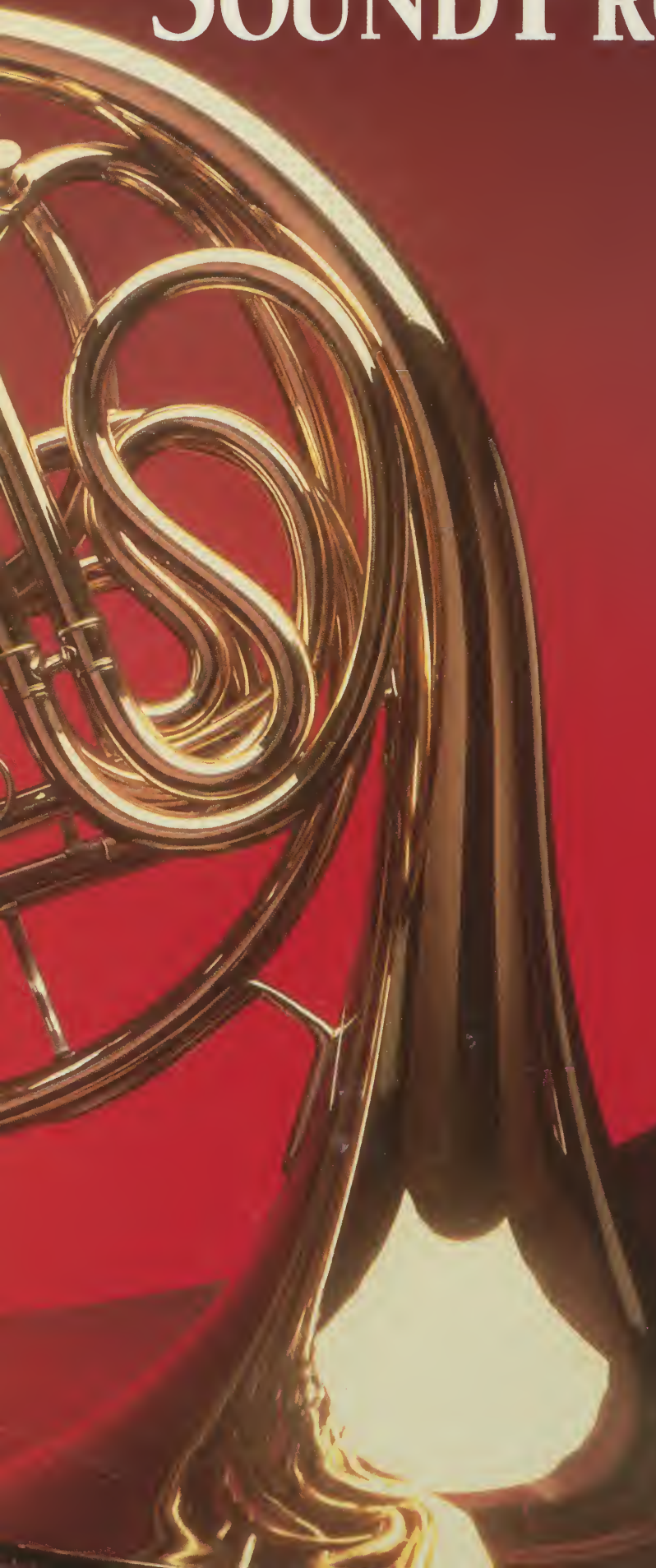


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AMA renews call for physician input on health care reform

During the crucial first 100 days of the Clinton Administration, the American Medical Association stepped up its involvement in the health system reform debate. AMA's goal: to ensure that patients' needs remain the focus of system reform.

The AMA organized an unprecedented two-day Washington summit, "A Time for New Partnership," on March 23-25 to encourage dialog between physicians and the Clinton Administration and Congress. Physicians from across the country gathered in Washington to hear Vice President Al Gore speak on health system reform; HHS Secretary Donna Shalala and Majority Leader George J. Mitchell (D, Maine) also addressed the physicians.

After a briefing by AMA legislative staff, the physicians visited with their representatives in Congress.

The AMA is continually working to make the voice of American physicians heard in Washington. As AMA EVP James S. Todd, MD, stated in a letter to White House senior health policy adviser Ira Magaziner, "Bring us into the process, and we can help make it work. Without the 'buy-in' of people in the front lines of health care delivery, enactment and implementation of reform will be much more difficult."

Contest boosts AMA's anti-tobacco crusade

AMA and U.S. Surgeon General Antonia Novello, MD, are sponsoring a nationwide contest to increase children's awareness of the dangers of smoking. AMA President John L. Clowe, MD, said the contest is part of the AMA's and the surgeon general's continued campaign to achieve a smokefree environment by the year 2000.

The contest is designed to combat the tobacco industry's "spending millions of dollars in advertising to encourage young children to start smoking."

AMA and the surgeon general last year sponsored a protest march in Chicago against cigarette advertising that targets children. They also demanded that R.J. Reynolds Co. drop ads featuring the company's most effective marketing tool — the cigarette-smoking Old Joe Camel that appeals to children.

The nationwide contest, called "Say No, Old Joe," is aimed at the Camel cartoon. Studies published in the December 10, 1991 JAMA showed children six years of age and older found the character just as recognizable as the Disney Channel's Mickey Mouse logo. Old Joe Camel's appeal increased smoking of that brand among children from five percent to 32 percent during a three-year period, the studies found.

"The AMA will continue its fight to eliminate underage smoking and put pressure on cigarette manufacturers who use deplorable advertising tactics to entice children to begin smoking," said Lonnie R. Bristow, MD, AMA vice chair. "Maybe Old Joe Camel has taken his last puff?"

Prepared by the Department of Communications Services. For information, call 800 AMA-3211, ext. 4416.

Smokefree workplace rules supported

The AMA urged Secretary of Labor Robert Reich to develop and promulgate standards that provide a smokefree work environment for all employees as soon as possible.

A letter from AMA EVP James S. Todd, MD, states the Association's belief that "this could be accomplished most easily by a total ban on smoking in the workplace." However, the letter said a standard might allow — but not mandate — a fully enclosed, separately ventilated designated smoking area for employees.

Citing an Environmental Protection Agency report released in January on the health hazards imposed by "passive" smoking on nonsmokers, the AMA said it now "is evident that action is needed on behalf of America's labor force." The letter urges that the Occupational Safety and Health Administration separate environmental smoke from other problems of clean indoor air.

AMA testifies before CLIA committee

Physicians must be allowed to perform certain laboratory tests in their offices without undue restrictions, to meet patient care needs and to help contain laboratory costs. J. Edward Hill, MD, of the AMA's Council on Legislation, recently delivered this message to the Clinical Laboratory Improvement Advisory Committee in Atlanta.

Dr. Hill addressed issues related to the physician-performed microscopy category. He stressed that HCFA, CDC, and the committee must share in complying with CLIA, including technical and administrative complications and assuring patient access to medically necessary laboratory services.

He said physicians are overwhelmed by CLIA, OSHA and ADA regulations, which are costly and time-consuming to administer. Many physicians are deciding not to perform laboratory tests in their offices as a result, Dr. Hill added.

AMA applauds new AHCPR guidelines

The AMA commended the Agency of Health Care and Policy Research for introducing its newest clinical practice guidelines on cataract surgery. The new guidelines suggest physicians should postpone surgery and use other measures to improve visual functioning until the cataract becomes too problematic.

"In an era when, more than ever, every medical dollar counts, the continuing development of practice parameters means that medicine and government are prepared to meet the challenges of the era by improving patient care while effectively managing costs," stated AMA EVP James S. Todd, MD. "Working with AHCPR has given us the opportunity to forge a new partnership between medicine and government with the potential to vastly improve patient care."

The AMA, working with other physician organizations, is leading activities to ensure the medical profession maintains control over the development and application of practice parameters that improve patient care and effectively manage costs.

Prepared by the Department of Communications Services. For information, call 800 AMA-3211, ext. 4416.

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Clarifications

In Dr. Bianco's article, "Consent to treatment, Application to performing arts medicine" (March 1993, Volume 42, Number 3), the third sentence in the section "Consent by spouse" (page 294) mistakenly implies that marriage endows a spouse with the right to co-consent for the other spouse or to veto the other spouse's given consent. The sentence should more appropriately read, "Some physicians and spouses mistakenly believe that marriage inherently endows one spouse with the right to co-consent for the other spouse or even a right to veto the other spouse's given consent."

Also in Dr. Bianco's article, a sentence in the second paragraph might suggest that Dr. Bianco believes that physicians spit on people. The sentence might more appropriately read, "Thus a person would be liable not only for contacts that cause physical harm, but also for those relatively trivial ones that are merely offensive and insulting, such as spitting in another's face, forcibly removing another's hat, or any contact brought about in a rude and insolent manner."

In "Combined dopamine and serotonin agonists: A synergistic approach to alcoholism and other addictive behaviors" (February 1993, Volume 42, No. 2), Dr. Hitzig wishes to clarify that in a study by Olds et al "fenfluramine in massive doses stopped lever pressing totally. The addition of amphetamine ameliorated this effect, but there was still suppression of lever pressing. The conclusions derived from this article are still in effect."

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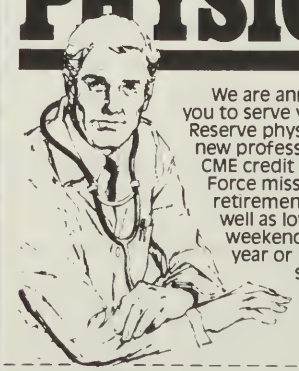


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A GREAT WAY TO SERVE

Joseph Snyder, M.D. New Med Chi President

Joseph Snyder, M.D. was recently inaugurated as president of the Medical and Chirurgical Faculty of Maryland for 1993-1994.

As president, Dr. Snyder notes that, "reform of the health care system is the number one problem and the number one issue of the year." He adds that he would like to see an increase in physician participation in organized medicine.

A 1962 graduate of Jefferson Medical College, Dr. Snyder completed his internship and an internal medicine residency at Jefferson Medical College Hospital. Following a fellowship at the National Institutes of Health, National Cancer Institute, Dr. Snyder completed a residency in ophthalmology at the George Washington University Medical Center.

Dr. Snyder is actively involved in organized medicine. Past president of the Maryland Academy of Ophthalmology and Montgomery County Medical Society, Dr. Snyder has also served as a member of Med Chi Council, vice-chairperson of the Council, AMA delegate, and president-elect.

Dr. Snyder currently maintains a private practice in Silver Spring and Bowie in ophthalmology. He lives in Silver Spring with his wife Madrian. They have two daughters, Lori and Lee.

Federal Communications Commission Order — Office Telephones

A Federal Communications Commission (FCC) order requires that all telephones in workplaces with 20 or more employees must be hearing-aid compatible by May 1, 1993. Businesses with fewer than 20 employees have until May 1, 1994, to comply.

All telephones manufactured in the United States since August 1989 have been required to be hearing-aid compatible. Phones manufactured before that date must be retrofitted with a new handset in order to comply with the FCC order.

Child Wellness Legislation

Effective with dates of service on and after 10/1/92, House Bill 485 required that certain health insurers provide specified coverage for child wellness services. The law applies to group medical expense policies providing dependent coverage which are delivered or issued for delivery in Maryland on or after October 1, 1992. The law does not apply to a self-insured plan. The child wellness services include

1. All visits for and costs of childhood and adolescent immunizations recommended by the Advisory Committee on Immunization Practices of the Centers for Disease Control and Prevention;
2. One visit for the phenylketonuria (PKU) test between two and four weeks of age;

3. All visits for, and costs of, age-appropriate screening tests for tuberculosis, anemia, lead toxicity, hearing, and vision as determined by the American Academy of Pediatrics;
4. The following services at each of the visits required under items 1, 2 and 3:
    a. a physical examination;
    b. a developmental assessment; and
    c. parental anticipatory guidance; and
5. Laboratory tests considered necessary by the physician as indicated by the services provided under items 1 through 4.

Please check with the child's insurer to determine coverage and how to code for these services.

Laboratory HCPCS Codes — Maryland BCBS

The implementation date of the 1993 lab codes has been changed to May 1, 1993, with a grace period through July 31, 1993. Physicians, suppliers, and providers may submit claims for services rendered during this grace period with 1992 and 1993 lab codes. Claims for services provided prior to the grace period must reflect 1992 codes. Claims with dates of service on or after the grace period (after July 31, 1993) must reflect 1993 Health Care Financing Administration (HCFA) Common Procedure Coding System (HCPCS) codes.

Clinical Lab Fee Schedule Codes— PABS

Current clinical diagnostic laboratory codes should be reported until further notice. A 60-day grace period will proceed the effective date during which time both the 1992 and 1993 codes will be accepted.

New Medicare Policy

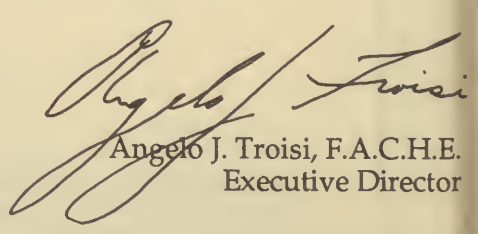
The most recent medical policy on concurrent care under Medicare follows this Executive Director's Newsletter.

1993 Med Chi Semiannual Meeting

Mark your calandars! The 1993 Med Chi Semiannual Meeting will be held Friday-Sunday, September 10-12, 1993, at the Sheraton Ocean City Resort and Conference Center.

Med Chi has obtained a special group rate of $110.00 per night for a single/double occupancy room* for this meeting. To reserve your room, call the Sheraton at 1-800-638-2100.

*Tax and incidentals not included.



Angelo J. Troisi, F.A.C.H.E.
Executive Director

Medical Policy

SUBJECT: **Concurrent Care**

EFFECTIVE DATE: **4/1/93**

CPT/HCPCS Code(s): **99221 - 99223, 99231 - 99233, 99238**

Description of Service: Concurrent care occurs when more than one physician is involved in the regular care of the patient. The role of each physician must be clearly defined to determine correct coverage and if the issue is not clear, clarification will be developed.

Clinical Indications: Coverage can be allowed if the services provided by each physician are established as reasonable and necessary as the result of an active concurrent role in the patient's treatment. This requirement can also be fulfilled if the patient's condition warrants the services of more than one physician on an attending rather than a consulting basis and all are determined to be reasonable and necessary. In making this determination, the specialty of each physician will be considered since the presence of multiple medical condition may require diverse medical or surgical services (e.g., renal failure and G.I. bleeding; respiratory failure in a post-colectomy patient). Care performed by physicians in different specialties or in different subspecialties of the same specialty is generally considered reasonable and necessary (e.g., surgeon and internist or cardiologist and nephrologist, respectively). The need for care of more than one physician in the same specialty will be carefully considered, but can be justified only if medical necessity is established (e.g., PTCA provided by an interventional cardiologist, and the on-going care of the coronary artery disease and acute M.I. by a non-invasive cardiologist).

If it is determined that the service of one or more of the physicians is not warranted, payment may be made only for the attending physician's services. If concurrent services are allowed, frequency and duration will also be considered and must be reasonable for the special circumstances that require additional care. The level of involvement by each physician may also differ and will be reviewed for appropriateness and necessity.

Billing Instructions:

A physician service must be provided and documented for reimbursement purposes. Charges for more than one visit a day will be denied unless justification is presented for medical necessity (e.g., sudden, acute condition; deteriorating medical condition; emergency situation, etc.). Only one initial comprehensive exam will be allowed for the attending and/or the consulting physician per hospital admission. A regular subsequent hospital visit will not be reimbursed in addition to the hospital discharge service (CPT 99238). The levels of care chosen must meet medical necessity and be appropriate for the content of the service provided which primarily includes the extent of history obtained, the physical exam, and the complexity of medical decision making required (key components).

Approved by: Barry S. Gold, M.D.

Barry S. Gold, M.D., F.A.C.P
Medical Director



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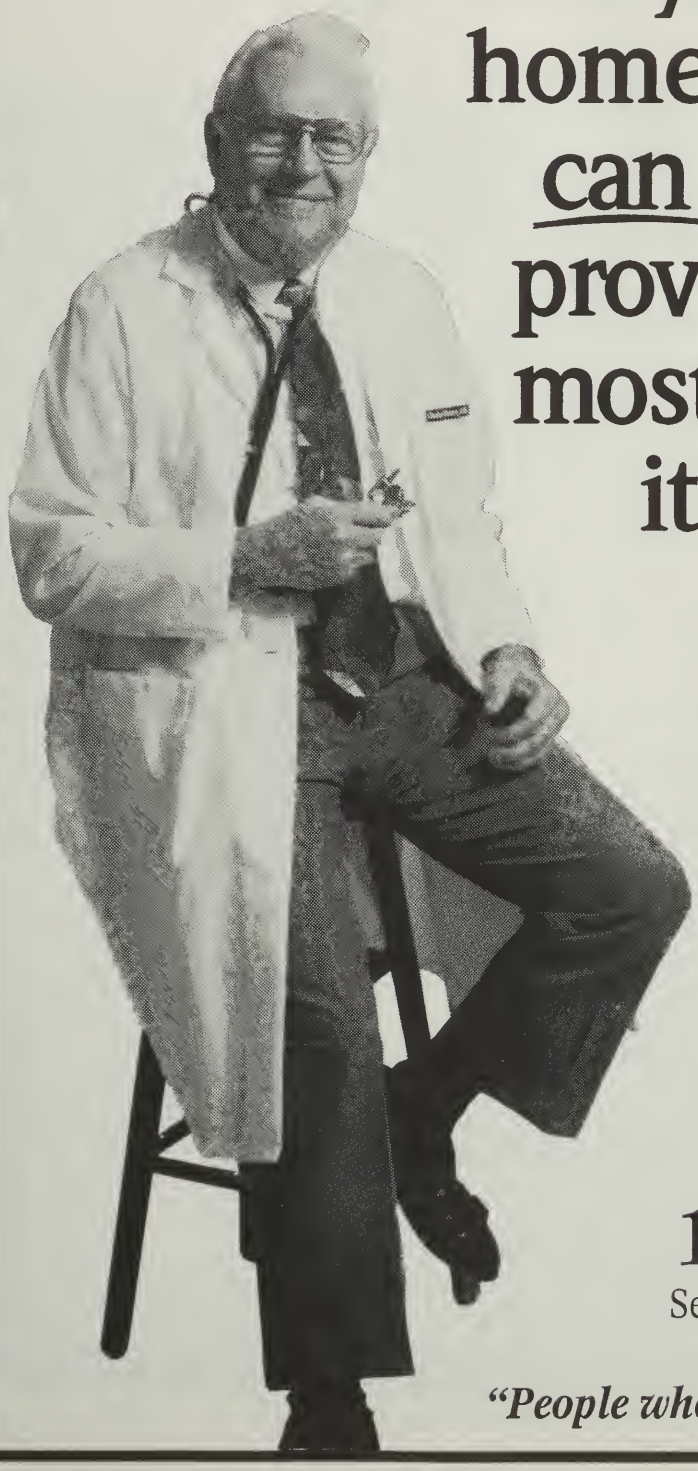
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LETTERS TO THE EDITOR

Quinacrine no longer available for giardiasis treatment

The paper by Malloy et al regarding giardiasis[1] was quite interesting, but requires an update as to therapy. Quinacrine (mepacrine, Atabrine) is no longer available in North America or in England or France to my knowledge. The manufacturer, Winthrop-Sanofi, lost its bulk supplier and has been unable to obtain another source that is acceptable to the US Food and Drug Administration (FDA).

Rheumatologists learned of this fairly quickly when lupus patients were unable to obtain the medication. I have called government agencies and foreign sources without resolving the problem. The FDA is willing to allow importation for personal use if one can find a foreign supplier. I am aware of the availability of chemical grade mepacrine and know that a few people are using that.

The use of a nonpharmaceutical grade of mepacrine is worrisome in light of the outbreak of eosinophilia myalgia syndrome. The latter has been shown to be due to a minor change in the manufacturing process, with formation of a different contaminant that seems responsible for the syndrome. That experience would lead me away from the use of anything but a well-tested pharmaceutical grade product.

Reference

1. Malloy DC, Groves C, Schwartz DA. Giardiasis: A case report and discussion of outbreaks in the United States. *Md Med J* 1993; 42:43-46.

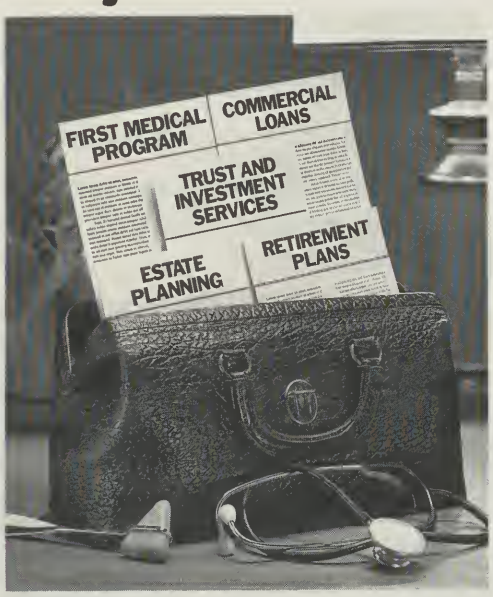
JAMES M. SOWA, M.D.
Towson, Maryland ■

LETTERS TO THE EDITOR

The editorial board of the *Maryland Medical Journal* welcomes comments, criticisms, recommendations, and observations from all its readers. Please submit letters to

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- intensive therapy specifically designed for people with histories of trauma and abuse;
- psychopharmacology;
- cognitive therapy;
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- stress management;
- managed milieu that teaches safe coping skills for symptoms such as: switching, dissociation, amnesia, and flashbacks;
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- dangerous to self or others and/or self mutilatory.

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Joseph Snyder, M.D.: 1993-1994 Med Chi president

Vivian Smith

Ms. Smith is director of public relations, Medical and Chirurgical Faculty of Maryland, Baltimore, Maryland.

Change is the buzzword in health care all over America. With President Clinton in the Oval Office, and Hillary Rodham Clinton in charge of reforming the American health care system, state medical society leaders have a great challenge—to assist in bringing their state into the forefront of health care reform, while keeping the needs of physicians and patients in focus.

On Saturday, May 1, 1993, Joseph Snyder, M.D. will become the 146th president of the Medical and Chirurgical Faculty of Maryland, and he is fully aware of the challenge he faces: "Reform of the health care system is the number one problem and the number one issue this year."



Figure 1. Dr. Snyder, an ophthalmologist in Montgomery and Prince George's counties, with his wife, Madrian.

Health care reform

Dr. Snyder does not think most patients want to eliminate the present system in favor of an unknown. He is opposed to a national health insurance program based on a one-payer system, or a system financed by the government. "I just don't think that it will work from a physician or patient standpoint," he says. He is confident that this is not what President Clinton is pushing. "I think that his message to Congress was that patients will have the freedom of choice. That impressed me."

Dr. Snyder does, however, find a major problem with the present reform movement–lack of physician input. "I don't think that any kind of system is going to work without the doctors being involved. There has to be practical medical input from physicians because we are the ones who deal with patients; we are the ones who know what will work and what won't work. Our input is critical to any workable solution," he asserts.

The American Medical Association (AMA) has been in the forefront of health care reform for the past several years with programs such as Health Access America, reminds Dr. Snyder. "The AMA has been up-front with the need for health care reform, so those who say that doctors are not interested in health care reform

are wrong. We have been deeply involved with it and are willing to assist in ways that are good for our patients."

Dr. Snyder thinks everyone, physicians and patients alike, are curious and nervous about how things will develop. While admitting there is no easy answer, he would like to see insurance reform, elimination of pre-existing illness clauses in various insurance policies, a return to a community-based rating system, and insurance coverage for all employed people, including the transfer of insurance for people who change jobs.

Dr. Snyder goes further to say that he does not believe everyone needs to be covered in the same fashion, by one insurance system, without the freedom of choice. "Speaking as a patient and not as a physician, I would not be happy if someone came along and said I must use XYZ insurance company."

The uninsured and Health Access America

While admitting that no plan is perfect, Dr. Snyder believes the AMA Health Access America plan addresses the issues of the uninsured and underinsured. The AMA has been deeply involved and is willing to negotiate a plan to benefit all patients, stresses Dr. Snyder. He believes that everyone who works should be covered by his or her employer, and that people who are unemployed, chronically ill, or disabled need to be helped by the government with the cooperation of the medical community.

Government regulation and cost containment

Dr. Snyder believes that "once government gets involved, all the paperwork stifles physicians." Physicians need to be able to practice medicine without bureaucracy, stresses Dr. Snyder. He thinks there has to be a balance, adding, "One cannot go for cost containment alone and improve quality." Physicians need to be involved in issues concerning the quality of health care so that quality is not lost in trying to save money. He fears that the practice of medicine becomes more impersonal with government interference. He is also concerned that the present managed care situation (health maintenance organizations) sometimes forces patients to change physicians from year to year. "This doesn't bode well for having a good physician-patient relationship."

Human immunodeficiency virus

Every year, measures are introduced into the legislature on human immunodeficiency virus (HIV). It is a topic physicians must continuously follow. Problems that have developed in emergency situations lead Dr. Snyder to believe it is important for testing to be allowed without consent when a patient is unconscious or otherwise incapable of consent. It should not make that much of a difference, he adds, because physicians should follow universal precautions under all circumstances.

Self-referral

Med Chi physicians have had many discussions about the self-referral issue. Dr. Snyder agrees with the solutions proposed by the Ad Hoc Committee on Self-Referral, the major point being that legislation is not an appropriate way to solve this issue. He does not find it inherently unethical for physicians to have laboratories in their offices as long as they use them appropriately. Doing away with this option will cause tremendous inconvenience to patients, adds Dr. Snyder. He does, however, think patients need to know up-front that the facilities they are being referred to are owned by their physician.

Smoking

A strong supporter of the anti-tobacco movement, Dr. Snyder has taken an active role in the Med Chi anti-smoking campaign. A longtime advocate of the two dollar a pack cigarette tax, he is glad to see it is beginning to gain momentum in the legislature.



Figure 2. L to R: Lori, the Snyders' older daughter, is in medical school at Dr. Snyder's alma mater. Lee attends the Wharton School of Business at the University of Pennsylvania.



Figure 3: Mrs. Snyder, the state auxiliary vice president, poses with Dr. Snyder outside their home.

He believes this tax will raise revenues and discourage people from smoking.

Membership

Dr. Snyder thinks there are too many Med Chi physicians who are not AMA members. He does not believe they realize or understand what the benefits of AMA membership are. There has been a major change in the AMA over the past several years, and it is "in the best interest of every physician to unite and join the AMA," notes Dr. Snyder.

As for Med Chi membership, Dr. Snyder intends to continue Dr. Yosuico's efforts to increase membership. "We need to find out from the components how many practicing physicians are not members and deal with them the same way as the AMA, by having every member recruit a member," says Dr. Snyder.

Med Chi goals

Dr. Snyder would like to see the present strides in legislative efforts intensified. He thinks that Med Chi strength comes from its diverse membership and sees the recent reorganization as a factor, referring specifically to the increased size of the Executive Committee. Med Chi will only continue to be strong by obtaining input from its members and changing with the times, he adds.

He does, however, think that the lack of unity among Med Chi members has been a problem and aspires to see this resolved. Once decisions are made by the Council and the House of Delegates, he stresses, members need to stand united, speak with one voice in public, and put differences aside. Dr. Snyder hopes that the dialogue between component and specialty societies and Med Chi leadership can increase.

Speaking with enthusiasm about the reorganization at Med Chi, Dr. Snyder commends the efforts of the Med Chi staff, stating that "growth and change are always needed to ensure that Med Chi can continue to provide quality services to its members."

Future of medicine

Medicine will see some significant changes over the next 10 years, declares Dr. Snyder. But he does not believe the changes will be radical; they will come by way of insurance reform and changes in the delivery of medical care. Dr. Snyder strongly believes that states need to be given the opportunity to do things within their own communities to see what works and what does not. He believes that nothing significant will happen in Maryland without Med Chi involvement. Dr. Snyder thinks Med Chi will continue to have a strong relationship with the executive and legislative branches of government and will be able to provide the information necessary for legislators to make informed decisions. "I see Med Chi as extremely important in any changes that take place."

Personal background

The early years. Dr. Snyder wanted to become a physician as early as tenth grade. Always interested in science, he thought medicine seemed like an interesting and gratifying profession. A Phi Beta Kappa, he received his B.A. from the University of Pennsylvania with honors in zoology.

Medical school, internship, and residency years. Dr. Snyder attended Jefferson Medical College where he completed his internship and first year of residency in internal medicine. "From the first day of medical school, I really felt that I was doing something that I enjoyed." He graduated at the top of his class. His talent is evidenced by his Anatomy Prize, Hoffman LaRoche Award, Surgery Prize, and Hobart Hare Honorary Medical Society designations on his curriculum vitae. In addition, he was elected to the Alpha Omega Alpha Honor Society.

He became involved in research with one of his professors while at Jefferson, which led him to the National Institutes of Health (NIH). "NIH was very exciting. We were doing the first combined chemotherapy for leukemia, and we were starting to

get some good results with patients going into long-term remissions. We were on the edge of really exciting things." While at NIH, Dr. Snyder began working with one of the ophthalmologists at the eye institute. Realizing he enjoyed ophthalmology, but having no formal training in it, he applied for a residency at George Washington University Hospital and was accepted.

Dr. Snyder finds ophthalmology to be "a fascinating field because it combines medicine, surgery, and neurology. It is satisfying because we can help most of our patients. It's a happy specialty."

Organized medicine. Many of Dr. Snyder's medical contributions have been in organized medicine. He first became interested in organized medicine in the 1970s. A member and later, president, of the Maryland Academy of Ophthalmology, he also served as chairperson of its legislative committee, and founded the academy's Political Action Committee (PAC). He was deeply involved with the Maryland legislature, primarily on ophthalmology issues. This led to his becoming actively involved in the Montgomery County Medical Society for which he also served as president. Dr. Snyder became a member of the Med Chi Council in the early 1980s and served as vice chairperson in 1985. When he became an AMA delegate in 1986, he got to see what the state of medicine as a whole was like. On a national basis, he found organized medicine very interesting.

Family life. Dr. Snyder has long been an active supporter of the auxiliary. His wife, Madrian, is a past president of the Auxiliary to Montgomery County Medical Society and has held many state auxiliary offices. Currently, she is first vice president.

Dr. and Mrs. Snyder enjoy traveling to different parts of the state and meeting new people. In addition, they regularly attend the theater and the National Symphony Orchestra. Dr. Snyder admits, "I like to play golf when I find the time, which isn't too often. I just enjoy getting away from the telephone for a while."

Seeing his two daughters through their college experiences is included in his personal goals. His older daughter, Lori, is a second-year medical student at Jefferson Medical College. Following in her father's footsteps, she is committed to organized medicine. She is president of the Jefferson Chapter of the Medical Student Section of the AMA. The AMA has recognized Lori with a plaque for outstanding membership recruitment. His younger daughter, Lee, is a second-year student at the Wharton School of Business at the University of Pennsylvania. She is the founding member of the Physicians' Children Volunteer Corps, which has the dual purpose of presenting a positive image of the medical family and assisting the community through volunteer efforts. Dr. Snyder notes that Lee may be interested in attending medical school, also. ■

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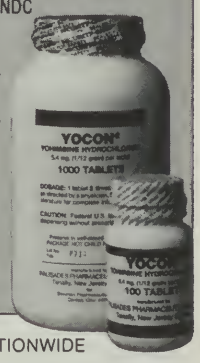
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A memorial to Joseph J. Harrison III

DeWitt E. DeLawter, M.D.; Constance Townsend; and Joseph Harrison IV

Dr. DeLawter is a diabetologist and an internist from Bethesda, Maryland. Ms. Townsend was assistant to the executive director under Jack Sargeant. Mr. Harrison is Joe Harrison's oldest son.



Figure 1. Joe Harrison

Joseph John Harrison III died suddenly on January 16, 1993, at the age of 63. There are no words to express the sadness this untimely passing brought to the members of the Medical and Chirurgical Faculty of Maryland, his family, and his friends. Joe was the associate executive director and comptroller at Med Chi, and had worked at Med Chi for nearly 30 years.

Joe was born in Baltimore, graduated from Polytechnic High School, and served for four years in the US Navy (1950-1954) as an aviation electronics technician. He attended the McCoy College of Business at the Johns Hopkins University, graduating in 1960. He became a certified public accountant in 1970.

He met his future wife, Marie Rowles, at the Cahill Recreation Center in Baltimore in February 1950; they were married in August 1952 during his naval assignment at Norfolk, Virginia. Joe and Marie had a wonderful marriage and were blessed with five children: Teresa Malinsky is a children's reading specialist who lives in Michigan, Joseph IV is a computer scientist at the Johns Hopkins Applied Physics Lab, Joan McDade is a nurse at Sinai Hospital, Thomas is a line technician for the Baltimore Gas and Electric Company, and Mary is a linguist--specializing in Japanese--currently on the faculty of the Keio University in Japan. Joe and Marie have also been blessed with six grandchildren.

"You are honestly the best father I've ever seen . . . . I can't believe how I've been blessed." Mary Harrison, Joe's youngest daughter, in a letter she wrote when she started college.

January 25, 1993

Dear Mrs. Harrison:

We wish to express our deepest sympathy at the sudden loss of your husband.

Joe Harrison will be truly missed by the medical profession of Maryland. He was respected and appreciated by innumerable physicians with whom he was associated during his distinguished career with the Medical and Chirurgical Faculty of Maryland. His effective management of the finances of the Faculty serves as a model of integrity and indeed contributed to the Faculty's efforts toward upholding the highest standards of medical care for the citizens of Maryland.

All of us here at the American Medical Association offer our heartfelt sympathy and we hope that the precious memories you have of Joe will sustain you and bring you strength and peace.

Sincerely,

James S. Todd, MD
Executive Vice President, American Medical Association

Joe's many accomplishments include his professional affiliations and volunteer activities. He served on the Board of Directors of the Med Chi Insurance Fund and was instrumental in the development of legislation enabling the creation of the Med Chi Agency, for which he served as secretary and treasurer. He was active in, and served as the treasurer of, the Maryland (MMPAC) Political Action Committee from its inception. He served as fund-raiser and treasurer of the Maryland Eye Bank for ten years. A member of the American Institute of Certified Public Accountants, the American Society of Association Executives, the Maryland Society of Association



Figure 2: L to R, top row: Barbara with husband, Joseph Harrison IV. Suzanne, holding Tommy, Jr., with husband Thomas Harrison (Jacquelyn, their youngest child, is missing). Mary Harrison. Mrs. Marie Harrison. Joan McDade (her husband Jim is missing). Joe. Mike Malinsky, Terry's husband. Bottom row: Laura, Tom's and Suzanne's oldest daughter. Joe's parents. Terry Malinsky, with two of her and Mike's children, Rachel and Jonathan (Matthew, their youngest child is missing).



Figure 3: Joe Harrison with his wife, Marie. *(Picture used with permission of Olan Mills.)*

Figure 4: Joe relaxing for a few minutes in his Med Chi office.



Executives, and the Professional Insurance Agents Association, he also found time to volunteer his services on committees of several local churches and served as vestryman and treasurer of St. Timothy's Episcopal Church in Catonsville, Maryland.

"He was a considerate and caring man . . . . His laugh was a good laugh and will be missed." His secretary Karen, whom he called Shirley.

Those whose paths met with Joe's, liked his vivacious personality, warmth, and the integrity and competence that he exuded. Staff who worked directly with Joe will remember him as easy-going, never giving direct orders, but always obtaining results through loyalty and respect. He helped when help was needed, coached when coaching was necessary, and counseled when counseling was required.

Physicians who entrusted Joe with their dues always felt a sense of security, knowing that he would handle and protect their money as if it were his own. He actively managed Med Chi funds to make the most from the investments, and increased Med Chi wealth over his years of stewardship.

Joe's commitment to saving money for Med Chi extended to a personal level. It was not unusual to spot him coming to the office in work clothes, with tools under his arm, to repair some plumbing or air conditioning problem. He personally oversaw many of the details of the expansion into the new building, down to insuring that the marble tiles were of top quality. He took paperwork home with him every night, often more than would fit into a briefcase, using a box instead. His staff fondly called him the "box man."

"At five o'clock we would all go home.... I really don't know what time he left to head home each day." Karen Buckmaster, Joe's secretary

Outside of work, Joe enjoyed participating in sports activities, including volleyball and especially tennis. Although he did not start playing tennis until he was in his forties, Joe became an

accomplished player, winning several tournaments and prizes. At home, Joe always welcomed friends and guests with his big warm smile, and was happy to have people stay as long as they liked. Even when daughter Mary brought home visitors from Japan, who did not speak English very well, Joe soon put them at ease and helped them in every way. Joe and Marie hosted a twice-monthly Bible study, and his insights were always sought and respected.

Joe will be sorely missed at Med Chi, for he was a major source of large and small bits of information about the building, the property within it, and the activities of the Faculty. Much of this information was contained in his office, in the many piles of papers and cartons saved there. Joe always told his staff not to disturb it, that "it's all good stuff"; he could always locate any particular information that was needed.

The sympathy and love of Med Chi members and staff are extended to his wife, Marie, and all his family and friends. Our prayers are for them and with them." ■

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Breast cancer: A common concern for patients and physicians

Robert E. Martin, M.D.

Dr. Martin is a general surgeon in Baltimore, Maryland.

ABSTRACT: *Some critics suggest that far too many surgical breast biopsies are performed in the United States. Meanwhile, malpractice suits are on the rise for physicians' failure to detect breast cancer. This creates a paradoxical situation for many physicians. Should the incidence of performing an invasive procedure that may prove inconclusive outweigh the risk to women's health and the possibility of a lawsuit?*

In the past five years, claims against physicians for failure to diagnose breast cancer have risen so sharply that today such suits are common in malpractice litigation.[1] Tens of thousands of surgical breast biopsies are done in this country each year. Some are done because of suspicious mammogram findings, but many are done because of equivocal or inconclusive mammograhic findings. The incidence of positive cancer diagnosis from such biopsies in this country is about one in five. This means four of five operations to confirm the nature of inconclusive mammogram findings result in a nonmalignant diagnosis.[2] Some critics of US statistics suggest we should be more discriminating, and that our rate of positive diagnosis should be one in three or even one in two.

Unfortunately, a better degree of accuracy is not possible given the current state of the art of physical diagnosis and breast imaging. A high degree of suspicion and liberal use of breast biopsy techniques are mandated by the risk to American women and the litigious nature of today's society.

The number of US breast cancer cases diagnosed last year was projected to be 180,000. Malignancy is often hidden from the examining hand and mammographic detection because of the relatively dense character of some breast tissue and the common lumpiness associated with fibroglandular breast disease. Often, dense breast tissue is associated with scattered microcalcification. Although many areas of microcalcifications are compatible with benign breast disease, such as adenosis and papillomatosis, some hide the presence of intraductal carcinoma or small invasive cancers. The

relationship between various patterns of calcification and the underlying pathologic process was addressed recently by Symonds.[3] Current literature indicates that once an invasive breast cancer grows to a diameter of 1 cm, incidence of metastatic disease to the axillary lymph nodes may rise to more than 20%. This disease may compromise the patient's life expectancy.[4] Recognizing and treating breast cancer when a lesion is small directly relates to the patient's long-term survival. Although an occasional cancer of 0.5 to 1 cm is recognized by palpation, mammographic imaging is currently the best method for detecting very small cancers. Some breast densities or scattered calcifications that look and feel benign may hide occult cancer. Therefore, a high index of suspicion and liberal attitude toward biopsy are imperative.

Just as calcification patterns can overlap the benign and malignant spectrum, physical findings of dense focal fibroglandular thickening can obscure or hide even relatively advanced breast cancer. Lobular invasive carcinoma often presents as an indiscreet focal region of tissue density with no clear mammographically suspect image. Such regional or focal physical findings, although compatible with benign fibroglandular breast disease, often require biopsy for critical interpretation. This defensive attitude leads to an increasing number of biopsies for benign breast disease. Such concern also causes radiologists to read mammograms defensively, recommending biopsy even for findings that meet radiographic criteria for benign breast disease with a remote possibility of carcinoma. Follow-up examinations alone, even over long periods, do not offer complete reassurance that one is not dealing with a malignancy.

Some minimally invasive biopsy techniques are of considerable value in many situations. These techniques include fine-needle aspiration cytologic biopsy, core-needle biopsy of palpable lesions, and stereoscopic biopsy of radiographic lesions. Stereotactic biopsy is done almost exclusively by radiologists, but fine-needle aspiration biopsy and cyst aspirations can be done by any examining physician. It is hoped that in the future, radiologists will be more comfortable doing guided cyst aspiration and fine-needle aspiration biopsies on suspicious radiographic shadows, advancing diagnostic accuracy by imaging.

As a surgeon attempting to evaluate many of these situations, I recognize a distinct tendency on the part of many radiologists to state their concern about the most minimal x-ray changes by using gratuitous phrases such as, "I cannot rule out the possibility of a breast carcinoma," or "Biopsy may be advisable if clinically indicated." Such phrases heighten the concern of the physician and patient. The radiologist does not make a specific recommendation, shifting the discussions of risk and the final decision regarding biopsy to someone else. Unfortunately, radiographic changes are often so minimal or ambiguous that only cautionary statements can be made. For maximum benefit to the physician and patient, some relative degree of concern should be clearly stated.

A 1% possibility of a shadow representing malignancy is quite different than a shadow projecting a 10% likelihood of cancer. A 2 mm or 3 mm faint collection of calcification usually defies an attempt at interpretation, but the very presence of calcium deposit often elicits an ominous phrase. Such minimal findings do not require urgent or definitive evaluation. Furthermore, soft tissue density with sharply circumscribed margins and homogenous characteristics do not represent radiographic characteristics of cancer. The fact that perhaps 1% of such soft tissue shadows may constitute medullary carcinoma does not mandate removal of all such lesions. Fine-needle aspiration and core-needle biopsy of palpable findings are simple economical methods of pathologic evaluation.[5–8]

Unfortunately, many surgeons dealing with breast disease do not yet have the necessary experience to evaluate subtle mammographic shadows and may depend entirely on radiologic opinion. Some surgical biopsies are done without the surgeon ever reviewing the radiographic findings. Clearly, optimum patient care mandates that the surgeon involved have some degree of expertise in radiologic evaluation, carefully reviewing mammograms before recommending surgery.

Some centers have increased the rate of positive biopsy by having more than one experienced radiologist or surgeon review such films and concur with the need for biopsy. Second opinions may have real merit in this area. Any physician or surgeon who advises against biopsy after another practitioner recommended it, however, is in a position of increased risk. Differences in opinion are common, and only a thorough discussion with the patient regarding relative risks may protect the physician from subsequent legal action if the dissenting opinion is incorrect. Clear, explicit documentation of such discussions should appear in the physician's record along with the options being offered. This way, the patient can take an active role in the decision-making process.

Some recent malpractice suits focused on the physician's failure to biopsy persistent palpable breast densities having the character of benign fibrous mastopathy in situations in which well-done mammograms showed no evidence of neoplasm. With about 8% of clinical cancers presenting with normal mammographic findings, a careful surgeon should freely use office techniques of biopsy including fine-needle aspiration or core-needle biopsy. Simple office techniques can offer considerable assurance to the patient and physician that a benign process is present. Biopsy, however, is the only means to confirm the nature of many breast thickenings. Radiologists evaluating patients for palpable breast lumps or densities with imaging techniques should include a statement indicating the limitations of imaging studies. Many patients, and sadly many physicians, still deem a negative mammogram as a definitive study.

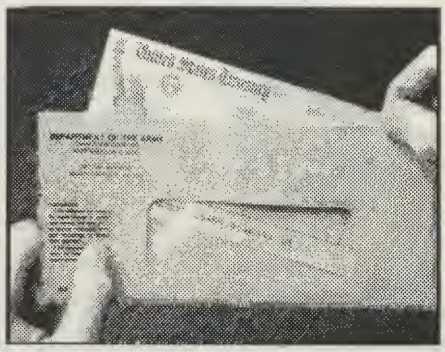
Extreme anxiety experienced by many women who are made aware of an undiagnosed breast abnormality may often only be alleviated by open tissue biopsy. Other women, aware of the uncertainty, can be managed with options such as careful observation or needle biopsy. The physician, however, must be certain that the patient's welfare is not jeopardized by prolonged observation. Physicians, radiologists, and surgeons should attempt to quantify for the patient the degree of risk associated with any palpable or imaged abnormality. The patient can then participate in decisions regarding observation or biopsy. It is only prudent to view the patient's concern as part of the physician's concern, and deal with the situation accordingly. A negative biopsy becomes a truly therapeutic procedure.

The increasing numbers of surgical biopsies associated with a low rate of malignancy and the necessary biopsies of vague breast thickenings that may represent occult carcinoma are not going to go away. Well-directed needle biopsies are part of the answer to this problem and should reduce the numbers of malpractice cases associated with failure to diagnose breast cancer.

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Chronic fatigue cured by nasal surgery

Alexander C. Chester, M.D.

ABSTRACT: *Two cases of severe unexplained fatigue with mid-facial pain and rhinitis are presented. Sinus computerized tomography (CT) findings were minor, but both responded to functional endoscopic nasal surgery with resolution (Case 1) or near resolution (Case 2) of chronic fatigue. Possible mechanisms linking nasal disease and chronic fatigue include reflex etiology and sleep disturbance associated with abnormal nasal airflow. Often not considered by the primary care physician in differential diagnosis of fatigue, chronic sinusitis should be explored as a cause in unexplained cases.*

Alexander C. Chester, M.D., is clinical professor of medicine at Georgetown University Medical Center in Washington, DC. ***Reprints:*** *Alexander C. Chester, M.D., 3301 New Mexico Ave., N.W., Washington, DC 20016.*

Chronic fatigue is a major symptom in 25% of patients seeking primary care.[1] Except for the fewer than half that are physical in cause, a psychological basis is often suggested.[2,3] Although chronic sinusitis is mentioned in rhinologic texts[4] and popular press[5] as a cause of chronic fatigue, it is absent in the standard internal medicine differential diagnosis.[6] Reviews of chronic fatigue fail to consider possible nasal causes.[1,7] The following two cases document resolution of chronic fatigue after functional endoscopic nasal surgery.

Case 1. An 18-year-old woman reported a sudden onset of fatigue, unrelieved by 12 to 18 hours of sleep per day. Symptoms included persistently drooping eyelids, nasal congestion, and weak extremities. One month after onset, she noted a mid-facial headache. Except for occasional allergic rhinitis, past medical history was unremarkable.

Five weeks after the fatigue began, physical examination and routine laboratory tests were normal. An initial monospot test was positive, but negative on three rechecks. IgG and IgM antibody titers to the Epstein-Barr viral capsid antigen were 1:160 and <1:10, respectively, confirming the initial monospot to be a false positive. Serum thyroxine, thyroid stimulating hormone, serum magnesium level, and erythrocyte sedimentation rates were normal. No symptoms suggested sleep apnea, primary sleep disorder, or depression as the cause.

Mid-facial headaches prompted an otolaryngological consultation, disclosing findings consistent with vasomotor rhinitis. Intradermal allergy skin testing was negative. Decongestants, antibiotics, local nasal steroid spray, and systemic steroids provided no relief. Computerized tomography (CT) examination of the sinuses demonstrated only mild right middle and inferior turbinate mucosal thickening.

Five months after onset, bilateral functional endoscopic nasal surgery was performed, including partial anterior ethmoidectomy and removal of a small amount of polypoid tissue in the left infundibular region not evident on CT examination. Fatigue resolved immediately and did not recur in the ensuing six months.

Case 2. A 34-year-old man reported a 10-year history of fatigue that began suddenly. Since its onset, it was associated with new frontal, mid-facial, and perinasal pain. Although able to work, he slept 12 hours a day, required frequent naps, and restricted his elective activities to less than half of those desired. Additional symptoms included rhinitis, decreased concentration, aches, sweats, photophobia, and occasional sore throats. Repeated extensive medical evaluations were unrevealing. Citing the sudden and unexpected onset, he repeatedly and pointedly rejected depression as a possible etiology. Evidence of primary sleep disorder or sleep apnea was absent.

Because of mid-facial pain suggesting sinusitis, he underwent nasal septum reconstruction, bilateral inferior turbinate submucous resections, and submucous resection of the right middle turbinate. Mid-facial pain and fatigue improved. Prompted by the response, however partial, a CT scan of the sinuses six months later demonstrated chronic bilateral ethmoidal sinusitis. One year after the initial procedure, he had functional endoscopic nasal surgery, including bilateral endoethmoidectomy, sphenoidectomy, and maxillary meatoplasty with polypectomy. His fatigue is almost entirely gone, and associated symptoms have resolved.

Discussion

In both cases, sinusitis and associated nasal problems manifested primarily with mid-facial pain. Such problems cause fatigue, according to rhinologic texts and popular press, but are usually not mentioned as causes in internal medicine literature.[6] Clearly, nasal stimulation or occlusion can result in profound respiratory and cardiovascular changes.[8–10] Experimental nasal obstruction causes fatigue, dyspnea, and other physical complaints.[11] Cottle believed abnormal nasal airflow alone may produce ill health. Nasal valve movements, he also maintained, are largely responsible for rest obtained during sleep.[8] Many years ago, reports described the resolution of fatigue and other illnesses with nasal surgery.[12,13]

Nasal symptoms are common in unexplained chronic fatigue syndrome, as well as sick-building syndrome which is also associated with fatigue.[14–16] Some criteria for chronic fatigue syndrome might be nasal in origin (e.g., sore throat and tender anterior cervical lymph nodes).[17] A possible evolutionary significance to this relationship has been postulated.[18]

Lavie documented sleep disorders in many patients with even mild nasal obstruction.[19] Micro-arousals and brief periods of awakening occur through the night, causing nonrestorative sleep. Moldofsky describes a similar sleep pattern in postviral fatigue syndrome.[20] Surgical correction or medical therapy of allergic swelling usually reverses sleep disorder and associated fatigue.

Absence of radiographic findings is common. In only 62% of those with clinical diagnosis of sinusitis are abnormalities noted on CT examination.[21] One study noted maxillary fluid on aspiration in 24% of those with normal radiographs.[22]

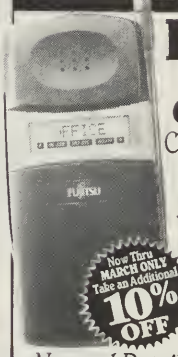
Sinus disease can cause fatigue through a number of possible mechanisms. As a treatable cause of otherwise unexplained chronic fatigue, it should be carefully considered in all cases.

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Maryland physicians on a humanitarian mission to war-torn Croatia

Bernhard Laukenmann, M.D.

Dr. Laukenmann is a staff anesthesiologist at Memorial Hospital at Easton, MD, Inc., Easton, Maryland.

ABSTRACT: *Six physicians from Maryland, California, and Utah participated in a 10-day humantarian mission to Croatia. They spent long hours in antiquated operating rooms performing maxillofacial and extremity reconstructive procedures; most patients were young or war-injured males. Though not a third world country, Croatia urgently needs finances to acquire drugs, supplies, textbooks, and equipment.*

The situation in Croatia is dramatic and chaotic: high inflation, unemployment, overall loss of buying power, and ethnic and religious strife. The fear of war again is great. There is, on the other hand, hope for peace and an association with the Common Market, although no authorized proposals have yet been made.

Economic conditions are chaotic. One year ago, the first wholly free elections since 1945 were held in Slovenia and Croatia. Nothing is settled in the previous Yugoslavian regions. Stalin told Tito that in "this war [World War II]... whoever occupies a territory also imposes on it his own social system." But recent historical events decided otherwise. The civilization of central and eastern Europe, which includes Croatia, is integrally linked to the civilization of western Europe.

Problems are enormous following the politically obsolescent, economically unworkable structure, and intellectually discredited Communist-Socialist system disintegration. Croatia's health care delivery system depends almost completely on support from the United Nations, International Red Cross, and private or corporate donations from the Common Market and United States.

I participated in a 10-day humanitarian mission to Croatia with a group of five other physicians from California, Maryland, and Utah. Prior to departure, each physician participant collected and packed drugs, supplies, medical instruments, and loan monitors donated from various pharmaceutical companies, medical suppliers, and hospitals. The group was headed by

Sonja Hagel, who was accompanied by camera operator Dominic Vlasic; Mr. Vlasic speaks fluent Croatian and German.

We left the United States the night of January 8, 1993, from the east and west coasts, respectively, and met collectively for the first time the following morning in Frankfurt, Germany, where we were briefed about our itinerary and work schedule for Croatia.

Delta Airlines and Croatian Airlines graciously shipped the voluminous freight gratis to the Clinical Hospital Center, Split, Republic of Croatia.

Sunday morning (January 10) we made rounds with Croatian colleagues at the Institute of Mother and Child Health (Institut za Zastitu Majki I Djece) under the guidance of pediatric surgeon Ivan Fattorini. The following day, patients were selected for surgery. Because our group consisted of two anesthesiologists and four plastic and reconstructive surgery specialists, trauma patients and those with congenital deformities headed the list. Supplies were sufficient, and monitoring equipment and anesthesia delivery systems were adequately functional but antiquated.

In late afternoon, group members presented lectures followed by question and answer periods. English and German permitted easy communication.

Since the group's purpose, dubbed "Second Chance," was to assist or perform selected complicated reconstructive procedures primarily on war-injured patients, we flew late at night to Split, a historical ancient port city on the Adriatic in southern Croatia. Two hospitals—Clinic A, a civilian hospital, and Clinic B, the previous Yugoslav Navy Hospital—held many combat casualties who were transferred there after initial care in the field in Croatia and Bosnia.

Long hours were spent in the operating rooms performing maxillofacial and extremity reconstructive procedures, as well as elective cases of syndactyly corrections and cleft palate repairs. Most patients were young or middle-age war-injured males in various stages of recovery and in otherwise good general physical condition. Surgical supplies, though scarce, were adequate with improvisations and flexible techniques. Drugs, especially for anesthesia, were very limited. One basic anesthesia routine was used: total intravenous technique with sodium pentothal, fentanyl, and Innovar (fentanyl citrate/droperidol), which is very popular because of its availability. Muscle relaxants were succinylcholine and Pavulon (pancuronium bromide).

Old anesthesia machines delivered centrally piped oxygen and nitrous oxide. I have practiced anesthesiology for 30 years and never operated machines such as these. Only halothane vaporizers were available. Except for old cardioscopes, which often malfunctioned, monitoring equipment was absent. Blood pressures by oscillometric observation and pulse palpation were basic monitoring. Use of the precordial stethoscope was not routine.

Because of inflation and economic depression, lack of hard stable currency is the primary commodity contributing to the shortage of things needed for patient care. The medical library is also in dire need of updating and expansion.

The Croatian doctors are very dedicated, well informed, and well trained. Many have hands-on experience from Switzerland, England, France, Austria, and Germany. Very few have US training, although some were visiting observers in the United States prior to Croatia's independence. Several young anesthesiology and surgery residents inquired about US training opportunities. The major stumbling block appears twofold: financing the journey and the Education Commission for Foreign Medical Graduates passing score requirement.

The nursing staff is very pleasant, cooperative, and dedicated—and poorly paid at about the equivalent of $75 a month. Physicians are salaried at approximately $200 a month.

Health care is free and of equal standard for every patient. The future structure of the health care system, however, is undecided. We were honored with a reception given by the Croatian Minister of Health in Zagreb, a combat-experienced surgeon. He told us work is in progress by the present government under President Tudsman to develop a definitive health care system, probably modeled after the German system.

On January 18, our hosts drove us to Mostar on the Neveret, a city in Bosnia that suffered heavy damage and casualties in the war. (Fighting erupted again the next day and four days later.) Guarded steel roadblocks were evident at the mountain pass before entry into the city. Both hospitals were targets of artillery and suffered structural damage. With armed personnel everywhere, an air of uneasiness was pervasive.

The administrator and chief surgeon of both hospitals led us on rounds through the institutes. One hospital is located in the city center, the other in a suburb. The damage caused by previous shelling was very apparent. Little reconstruction had been done due to lack of money and materials. The doctor had not been paid salary for nearly two years. He lives on hospital food and works under very adverse conditions. During the siege of Mostar, nothing could move in or out of the city for 90 days. Two surgeons, an anesthesiologist, and a nurse were killed during an ambush against their ambulance. Ambulances are now camouflaged.

The hospitals are solely dependent on United Nations and Red Cross supplies. Many patients are warded in the boiler room and subterranean cellar corridors. The whole city was cut off from electrical power, and when the diesel fuel supply for the hospital generators was expended, car batteries provided some power and then candles. The destruction of parts of the city resembles central Europe at the end of World War II. All bridges across the Nevetra River, except one 500-year-old pedestrian crossing, have been destroyed.

En route to Mostar, we briefly visited a refugee camp. Men huddled or walked about quietly. Women washed belongings at a cold water tank in the outside courtyard of the gymnasium, where refugees were housed. Children sat quietly with their parents or moped about. A local doctor treated minor urgent health problems and made referrals to outlying operative hospitals.

Basic foods were supplied and cooked in a makeshift community kitchen courtesy of the Italian government. The faces of many of the homeless expressed deep pain and sorrow. The number of refugees in Croatia would be equivalent to 40 million refugees in the United States based on the respective population ratio.

When we returned to Split, we had another long, productive day in the operating rooms. Lectures were part of our obligation and were well received in Zagreb and Split.

The day before our departure from Croatia, the mayor of Split and city health authorities accompanied us on a long excursion by helicopter over islands in the Adriatic Sea to Vela Luka on Korcula Island. We visited the local hospital and rehabilitation center, seeing state-of-the-art procedures in rehabilitation and orthopaedic surgery.

This landscape and sea resort is breathtaking, and its inhabitants are extremely hospitable. Homer, over 2,000 years ago, included Korcula's beauty in rhyme in *The Odyssey*. The surroundings completely veiled the aura of a war in progress less than an hour's flight away.

The most impressive part of the journey was a visit to Toplice Rehabilitation Center approximately 75 miles northeast of Zagreb. Nearly 900 beds were occupied, mostly by war-injured of all kinds. Brief clinical presentations showed the fury and misery of hapless victims of war: a 3-year-old girl clasping her floppy-eared stuffed animal with her right arm because she was a left-sided hemiplegic with total cortical blindness from a shrapnel head injury; a 23-year-old above-knee amputee soldier with multiple shrapnel scars suffered during an attack in which his wife and infant son were killed; a 21-year-old male paraplegic from a sniper bullet lodged in his spine; a young boy who lost both arms. The victims needed prosthetic devices unavailable because of lack of funds in the economically ravaged new republic. The younger patients would need frequent replacement devices to adjust to growth. But the Toplice institute is unsurpassed in its delivery of care due to the dedication and expertise of its staff.

The journey drove home to me what the human will can perform against overwhelming odds and strengthened my sense of purpose in the craft with which I earn my living, bringing to it even more enthusiasm and compassion. The medical community in Croatia performs at the highest standard of care in the fields in which I have been involved: anesthesiology, reconstructive surgery, and rehabilitation.

There is an urgent need for finances to acquire drugs, supplies, instruments, monitors, updated textbooks, medical periodicals, and to upgrade postgraduate continuing education, replace antiquated equipment, and step forward into computer-facilitated medical technology.

Croatia is not a third world entity; there are good road systems, telecommunications including fax systems, mass transit transportation, and modern housing. For Croatia, the word "Europe" not only represents a phenomenon of geography but a spiritual notion synonymous with the word "west."

Our mission benefited Croatian colleagues and patients. It could be a success if we in the "west" are financially supportive. The necessary legal paper work is in progress for charitable donations.

Participants of "Second Chance" were Brian Kinney, M.D.; Bernhard Laukenmann, M.D.; Burr Von Mauer, M.D.; Roger Orsini, M.D.; John Walker, M.D.; Sonja Hagel, R.N.; and Dominic Vlasic of Video Productions. ■

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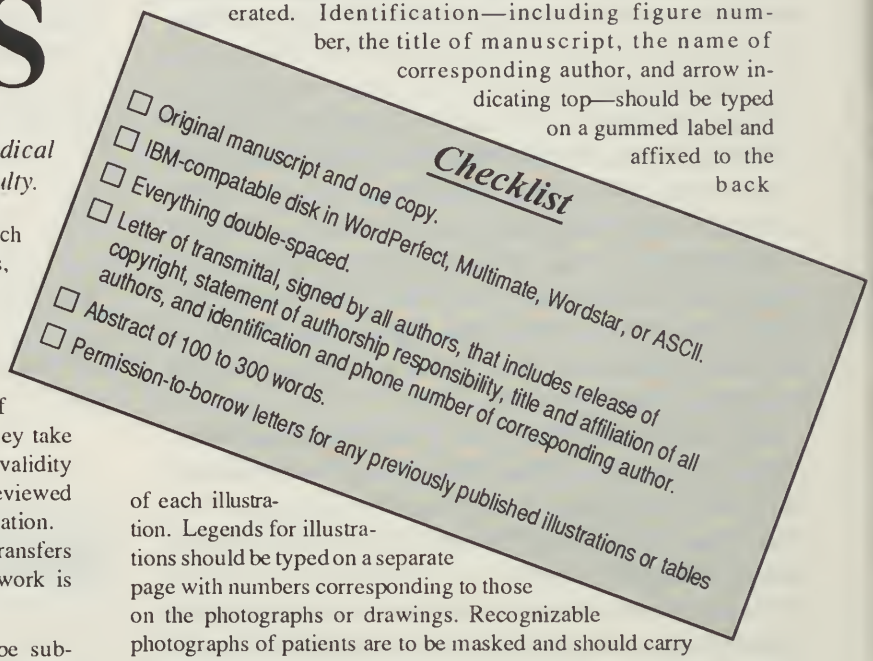
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The first American medical school

Joseph M. Miller, M.D.

ABSTRACT: *John Archer, a physician from Harford County, was one of the graduates of the first medical school on American soil–Philadelphia College–in 1768. The names of the initial instructors, including John Morgan, William Shippen, and Thomas Bond, and of the first graduates, including John Archer and Jonathon Potts, are well known to most medical historians. Many of these early American physicians had a deep sense of political commitment, and placed conscience and love of country above their medical practices.*

Dr. Miller is a retired surgeon from Timonium, Maryland.

John Archer, B.M., of Harford County, is moderately well known to many doctors in Maryland because his biography was presented previously in this journal.[1] Of major interest, because of the approaching bicentennial celebration of the Medical and Chirurgical Faculty of Maryland, is the fact that, in 1799, the General Assembly of Maryland permitted the incorporation of the Faculty; Archer and his son, Thomas, were among the incorporators.[2,3]

Archer's preliminary education was obtained at the West Nottingham Academy where one of his classmates was Benjamin Rush.[4,5] Obtaining an A.B. and an M.S. at Princeton, Archer embarked upon the study of theology under Presbyterian auspices in 1762. In August, and again in December of 1764, however, the Presbytery of New Castle denied him the privilege of pursuing a theological career. Rebuffed at this point, Archer turned to medicine and "read" with Dr. Thomas Morgan in the spring of 1765 in Philadelphia. In the fall of that year, a successful effort to create a medical school was consummated in that city, and Archer continued his education in the initiatory course of medical lectures at the Philadelphia College.

Some American physicians of the eighteenth century, trained in the great European medical schools, realized that medical education in the colonies was sorely lacking in many respects. Apprenticeships offered a poor, meaningless form of instruction because students could not properly

visualize and understand the diseases and trauma they were expected to treat. In addition, education given in a nonsystematic manner can be self-defeating. The concept of medical teaching with practical experience in a well-defined curriculum is the foundation of the method by which good doctors are made, but such is not possible unless three factors are joined: a university to provide the academic stimulus and environment; a hospital to ensure that patients with a wide spectrum of diseases are available for study; and a medical school. All institutions should be under one system of guidance.

These thoughts must have been in the minds of certain individuals in Philadelphia at that time.[6-8] The capital of the Penn domain and the largest colonial city with a population of 25,000, however, did not even possess an institution of higher learning, but the necessary steps to produce a satisfactory medical school were taken here serially.

Benjamin Franklin wrote at that time, "The first drudgery of settling new colonies is now pretty well over, and there are many in every province in circumstances that set them at ease and afford leisure to cultivate the finer arts and improve the common stock of knowledge."[9] In 1743, Franklin asked the colonists to start a Philosophical Society for the promotion of useful knowledge among British plantations in America. The proposal was well received and was accomplished most successfully.

The next step was the creation of an institution of higher learning in which, again, Franklin had a great part. The formal opening of an academy occurred in 1751, and the undertaking was so outstanding that the trustees obtained a charter from the proprietors in 1753. The beneficial achievements of the "Academy and Charitable School in the Province of Pennsylvania" led to a second petition to permit the conferring of collegiate degrees. The "College and Academy of Philadelphia" granted its first baccalaureate degrees in 1757.

In his autobiography, Franklin related that Dr. Thomas Bond conceived the idea of creating a hospital for the "sick, injured, and lunatics" in the city. Chartered in 1751, it opened a year later. The founders of the institution thought that it would also provide instruction for young individuals aspiring to become doctors. Most of them would be apprentices of the attending physicians, although others without such formal attachment could attend.

This teaching, however, could not furnish the systematic framework so necessary for a good medical education. Some students, aided financially by their parents, went to one of the professional schools in Europe to complete the education afforded by an apprenticeship.

The earliest mention of a medical school in Philadelphia occurred in a letter from Dr. John Fothergill of London to James Pemberton of Philadelphia recommending that Dr. William Shippen, Jr. give a course in anatomy. Fothergill also noted that Dr. John Morgan would soon return to the city to help Shippen start such a school.

The great physicians of London in the period of 1750 included Fothergill, a devout Quaker, whose father and brother were eminent preachers who traveled extensively in the colonies. Familiar with the plans of Morgan and Shippen, Fothergill told Pemberton that these individuals would be able to "erect a school for physic." Pemberton, a Quaker merchant and philanthropist, was an ideal person to further this scheme. He became a member of the first Board of Managers of the Pennsylvania Hospital and served on the board for 22 years.

In 1762, Shippen returned from London to teach at his private school of anatomy, but awaited the homecoming of Morgan and others to form a medical faculty. Morgan came back in 1765 with a well-conceived plan for a medical school in mind. A brilliant student at Edinburgh, where he received his doctorate in 1763, he was well qualified to father an institution to train physicians. He formulated a proposal to introduce new professorships into the college for the instruction of those individuals inclined toward the study and practice of physic and surgery. The trustees of the college were greatly impressed and appointed him professor of the theory and practice of physic.

Aware of the importance of the establishment of medical education in the colonies, the authorities invited the new professor to address the graduates at the next commencement. Fully conscious of his responsibility in this innovative procedure, Morgan sketched a plan to include the branches of medicine that should be offered at the new institution: anatomy, materia medica, botany, chemistry, and the theory of medicine and practice.

Shippen was, of course, disappointed that he did not have the leading role in the new enterprise inasmuch as he had plans of his own for a school. He did, however, apply to the trustees for a professorship in anatomy and surgery, which was immediately granted.

The courses given by Morgan (materia medica) and Shippen (anatomy and surgery) did not constitute a complete medical curriculum, and the institution may have been poor in comparison with its European counterparts. It was, however, infinitely better than the training provided by an apprenticeship. The medical teaching at the college was buttressed by clinical lectures given by Thomas Bond at the hospital, who, strangely, was never made a professor. He taught well and continuously, and had a deep interest in pathology as a method of obtaining disease information that was otherwise not available.

Among those who had instruction in the first three sessions were the 10 individuals who received a degree in 1768. In addition, other experienced apprentices undoubtedly were classmates, although they did not bother with the examinations or degrees.

On June 21, 1768, the students who had completed the plan of studies in a satisfactory manner were awarded a bachelor of medicine degree. The trustees, conscious of the incompleteness of their academic curriculum, decided not to award the doctorate as they thought they might be presumptuous to claim equality for

their three-person school with those older and better-staffed European institutions. Three years later, four members of the first class (Elmer, Potts, Tilton, and Way) returned to present their theses and receive the doctor of medicine degree. In 1789, the college abandoned the experiment of offering two degrees. This step may have been taken in retrograde fashion; for a century, schools without university connections offered the doctorate, which meant that the degree became meaningless as evidence of professional qualifications. Firm standards against which to measure the quality and depth of medical preparation did not exist, and medical schools were free to graduate and endow whom they pleased. Proprietary medical colleges were chartered by state legislatures in defiance of any attempt at control. Certainly this was not a state which Morgan and Shippen would have desired.

A few years after their graduation from the college, most of these men became part of a great revolutionary process by which a democracy, an example to the rest of the world, would be born. They, along with their older medical colleagues who were involved with the formation of the Declaration of Independence and the Constitution, had a deep sense of political commitment that is rarely seen in medical circles today.

The earlier group, being older and more mature, courageously pledged their lives and fortunes to create a new country. They acted as if they had heard the voices of Plato, Adlai E. Stevenson, and John F. Kennedy talking about citizenship and its responsibilities. They were not compromising politicians well versed in the service of government, but were, instead, extraordinary people for their times who saw their duty and did it.

The newly graduated group **(Table 1)**, whose average age was a little over 25, nevertheless, strongly resembled their older colleagues.[10] They sought and accepted armed service as necessary to engender their new country. They were well-educated, native-born Americans who, in a historically critical moment, placed conscience and love of country above their medical practices.

Three members of the group had received a bachelor of arts degree and one, a master of arts degree, from Princeton before attending the medical school. Having previously been given the bachelor of medicine, four men returned in three years with a Latin thesis and qualified for the doctorate degree.

These men were astute, patriotic, and willing to serve their country. Eight of these men were surgeons in the armed forces, and two of them died as a result of a service-connected illness. Two were members of a Provincial Congress, and three of a Continental Congress. One was later elected to the House of Representatives, and one to the Senate. Some were prominent in their state legislatures, and five became members of the American Philosophical Society. Franklin, Morgan, Shippen, and Bond could well be proud of this exemplary group whom they aided at the start of their medical careers.

John F. Kennedy might have had these men in mind when he pronounced his well-known philosophical charge: "Ask not what your country can do for you. Ask what you can do for your country." These early physicians were an incomparable group, able to approach and treat the problems of war and then return to an excellent civilian existence. The class of 1768 could serve well as a model to future generations of doctors.

Table 1. The ten graduates of the first American medical school

Name	State	Previous degree(s)	Degree in 1768	Degree in 1771
John Archer	Maryland	A.B.,M.S.	B.M.	-
David Cowell	Pennsylvania	A.B.	B.M.	-
Samuel Duffield	Pennsylvania	-	B.M.	-
Jonathon Elmer	New Jersey	-	B.M.	M.D.
Humphrey Fullerton	Pennsylvania	-	B.M.	-
David Jackson	Pennsylvania	-	B.M.	-
John Lawrence	New Jersey	A.B.	B.M.	-
Jonathon Potts	New Jersey	-	B.M.	M.D.
James Tilton	Delaware	-	B.M.	M.D.
Nicholas Way	Delaware	-	B.M.	M.D.

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Patients' rights in a nursing home

Henry E. Schwartz, Esq.

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ABSTRACT: *Under state and federal law, nursing home residents have many rights, including the right to be treated with respect, to receive reasonable accommodation to individual needs, to not be abused, to be free from unwarranted restraints, to refuse treatment, and to participate in treatment planning. Physicians need a working knowledge of certain fundamental legal concepts in order to help patients, particularly with regard to withholding or withdrawal of life-sustaining treatment.*

Many physicians are called upon to provide advice to patients in, or considering placement in, nursing facilities. In both situations, physician advice and counseling are critical to the physical and emotional well-being of both the patient and the patient's family.

Although physicians are, of course, comfortable giving medical advice in such situations, they are also often called upon to give legal advice or, at least, have some working knowledge of certain legal principles. Accordingly, physicians need some familiarity with the rules that apply to long-term care.

Residents' rights

Under state[1] and federal[2] law, residents in nursing facilities have the following rights, among others:

- The right to be treated with consideration, respect, and full recognition of human dignity and individuality
- The right to reasonable accommodation to individual needs and preferences
- The right to be free from mental and physical abuse
- The right to be free from physical and chemical restraints, except those ordered by a physician for clearly indicated medical needs
- The right to participate in the planning of medical treatment
- The right to refuse medication or treatment

An important right is the right to be informed about, and participate in, the care and treatment provided at the long-term care facility. This applies not only to initial admission and the medical care provided, but to other aspects of daily life in the facility, such as meal times, bed times, food, entertainment activities, and even the resident's attire.

A physician who is sensitive to these issues can assist the resident or resident's family in making sure that the resident's rights are respected, and that the resident retains, to the fullest extent possible, dignity and maximum control over the living environment. Such issues can be critical in the successful adaptation of the resident to the nursing facility.

Health care decision making

A competent resident's right to make decisions regarding care includes the right to refuse medication or treatment. Difficulties arise, however, when the resident is not competent to make these decisions. In such circumstances, the physician can play a key role in assisting the resident and resident's family in preparing for such decision making, and in making such decisions when the need arises.

Substitute decision making for patients who are not competent is a complicated legal, medical, and ethical issue. Much has been written about this subject, and the attorney general of Maryland has tackled the issue in two lengthy opinions.[3] The attorney general has also issued a short memorandum on the subject, which is to be provided to all residents of Maryland nursing facilities. The memorandum outlines the three methods under Maryland law by which a competent person can designate, in advance, how medical decisions should be made once that person is no longer competent to make those decisions:

- A living will can provide for the withholding of life-sustaining treatment for a patient with a terminal condition.
- A durable power of attorney for health care can allow a designated person as much decision-making authority as the patient wishes to delegate.
- A patient may describe to the physician those decisions he or she has made with regard to the providing or withholding of life-sustaining treatment. If this information is provided, it should be documented in the patient's medical record at the time that it is provided.

If none of these avenues are taken in advance of incompetency, there are circumstances in which family members may be in a position to exercise decision-making authority short of a court-ordered guardianship. While the law clearly provides this type of authority for **consent** to medical care, there is some question as to the right of family members to **withhold** care without other specific legal authority.

Although a lawyer should ideally be involved in substitute decision making, the physician can and should play a major role on such occasions. Patients are in need of medical advice concerning their options for advanced decision making, and family members required to make such decisions need counseling with regard to medical options, quality of life expectations, and determination of what the desires of the patient would be if the patient were able to express those desires.

Physicians are increasingly called upon to assist patients and families in dealing with nursing home placement, care provided in such facilities, and thorny questions regarding the withholding or withdrawal of life-sustaining treatment. As a result, a working knowledge of certain fundamental legal concepts is a necessity for physicians to help patients with these difficult problems.

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4. Health-General Article. §§S5-601 *et seq. Annotated Code of Maryland.* ■

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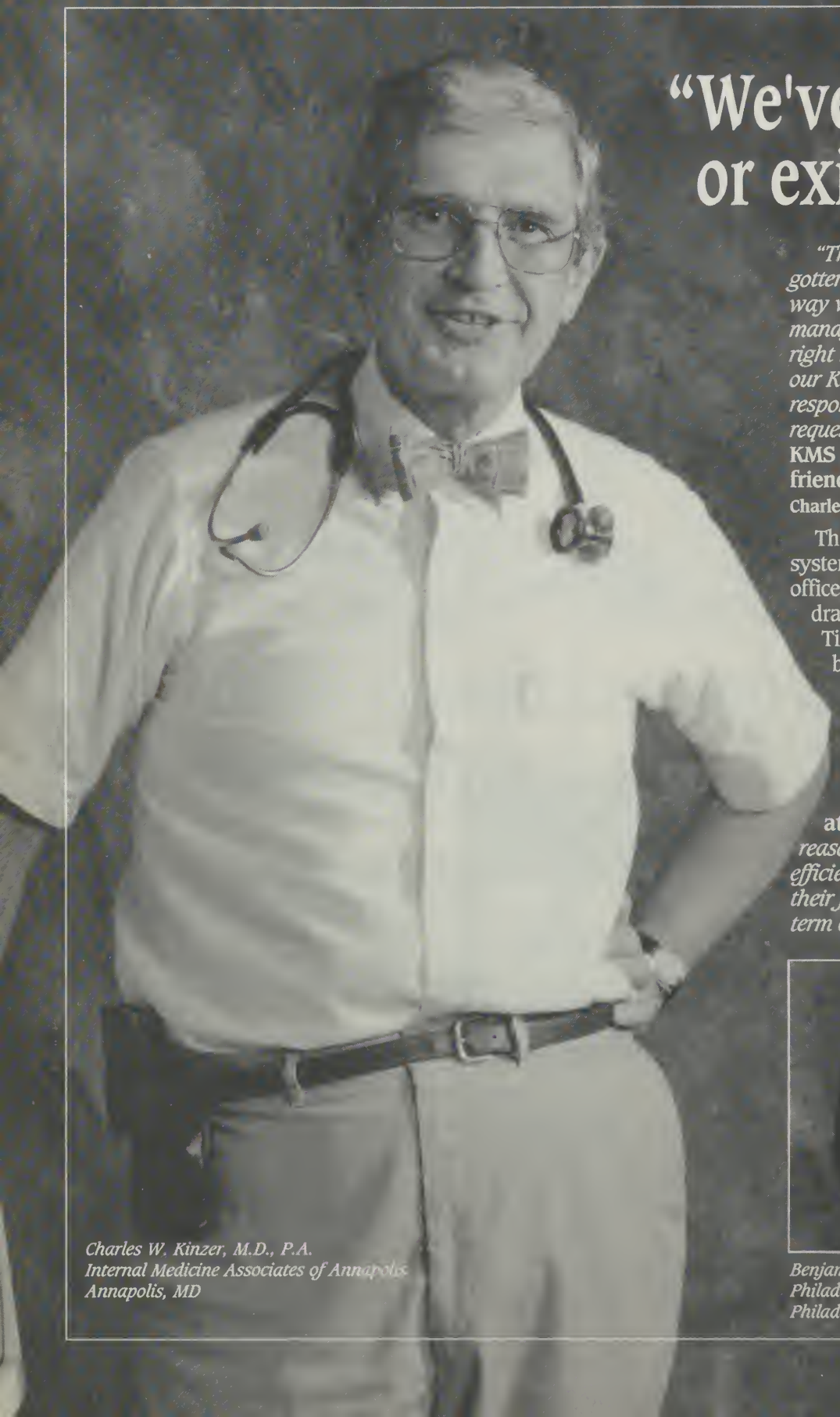
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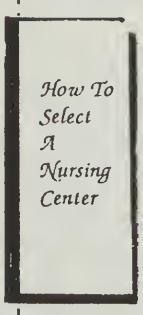
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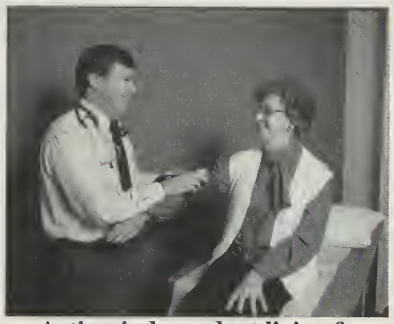
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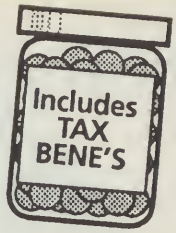
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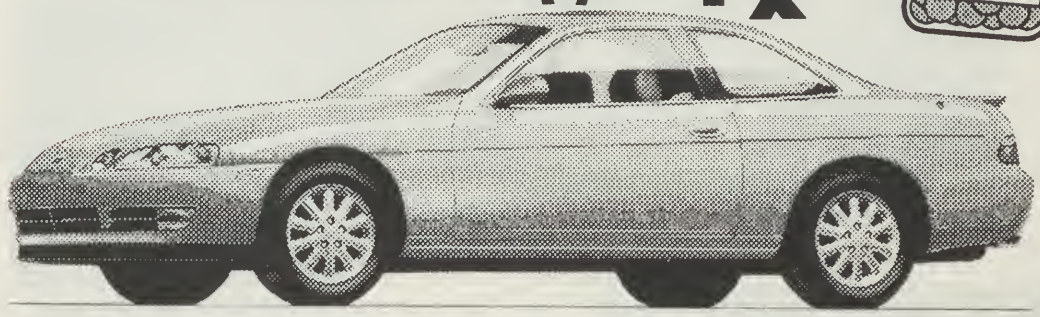
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Imaging Case of the Month

A 25-year-old male presented with progressively worsening acromioclavicular joint pain following a fall onto the shoulder while skiing. Initial radiographs revealed no evidence of fracture or other osseous abnormality. A radiograph (**Figure 1**) was obtained approximately three months following the injury. A magnetic resonance imaging (MRI) examination performed at this time included T_1 weighted (**Figure 2**) and T_2 weighted (**Figure 3**) oblique coronal images of the shoulder.



Figure 1.



Figure 2.



Figure 3.

Post-traumatic distal clavicular osteolysis

Osteolysis of the distal clavicle represents a relatively rare complication of direct trauma to the acromioclavicular joint. Although the inciting injury often involves acute separation of the acromioclavicular joint, repetitive minor trauma has also been implicated as a potential cause. Clinically, the patient presents with pain and weakness that progressively worsens as the osteolysis progresses. Treatment consists of immobilization or, in more severe cases, surgical resection of the distal clavicle. Without treatment, the lytic phase usually persists for 12 to 18 months and may involve up to 3 cm of distal clavicle. A reparative process follows the lytic phase, but chronic pain and disability often persist. Minor trauma, years later, may reactivate the process.

The pathogenesis of this disorder remains uncertain, but several potential mechanisms have been proposed. Osteoclastic reaction and resultant bone resorption may be triggered by hyperemia, angiomatosis, and synovial hyperplasia—a nonspecific soft tissue response to trauma. Autonomic nervous system activation may also play a role in mediating increased blood flow and subsequent osteoclastic and synovial stimulation.

Conventional radiographic evidence of osteolysis typically develops within one month of injury, but delayed onset has also been reported. MRI findings of marrow infiltration and synovial reaction may precede conventional radiographic evidence of osteolysis, potentially permitting earlier diagnosis and therapeutic intervention.

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PHYSICIAN AUTHORS WANTED

"Imaging Case of the Month" is a regular feature of the *Maryland Medical Journal.* Coordinated by the Maryland Radiological Society, the cases presented provide a review of a broad range of diseases and pathological processes of interest to a wide range of specialists.

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A Clinical Moment with Diabetes

Diabetes and thyroid disease

It is vital that physicians caring for patients with diabetes mellitus appreciate the importance of potential interactions with thyroid diseases. First, the two disorders occur in the same patient relatively often due to their common autoimmune pathogeneses. Second, thyroid dysfunction can have a significant impact on glycemic control, particularly in hyperthyroidism. Third, clinical and laboratory diagnosis of thyroid dysfunction in patients with poorly controlled diabetes may be challenging. Finally, there are certain special considerations in the treatment of hyperthyroidism and hypothyroidism when there is co-existing diabetes mellitus.

Patients with either diabetes or autoimmune thyroid disease are reciprocally predisposed to develop the other disorder (**Table 1**). Both hypothyroidism and hyperthyroidism are more common in patients with diabetes, as is the transient thyroid dysfunction that occurs in women during the postpartum period. Furthermore, other subtle evidence of thyroid disease that may later blossom into overt hypothyroidism is quite common. Subclinical hypothyroidism is a state in which the serum thyroid stimulating hormone (TSH) is elevated despite a serum T4 concentration that remains within the normal range. Despite its name, subclinical hypothyroidism, in some patients, may be associated with reversible symptoms attributable to mild thyroid hormone deficiency. Many physicians choose to treat patients with subclinical hypothyroidism if (1) they have symptoms; (2) if they have detectable serum antithyroid antibodies, which predict a relatively high rate of subsequent frank hypothyroidism; or (3) if they have an elevated serum low-density lipoprotein (LDL) cholesterol concentration, to which hypothyroidism may be contributing.

Table 1. Diabetes and thyroid diseases: Reciprocal predispositions

Thyroid disease in diabetes

- Hypothyroidism: 3%
- Subclinical hypothyroidism: 13%
- Hyperthyroidism: 1%
- Postpartum thyroiditis: 11%

Diabetes in thyroid disease: 2-3%

Conversely, patients with thyroid dysfunction due to either Graves' disease or autoimmune (Hashimoto's) thyroiditis are more likely to develop diabetes mellitus, particularly insulin-dependent diabetes. Such patients have been shown to have a higher prevalence of anti-pancreatic islet cell antibodies, just as individuals with diabetes are more likely to have antithyroid antibodies. The fundamental pathogenesis of these autoimmune endocrine diseases is not understood, although there is clearly a familial predisposition, and genetic characteristics of the immune response (e.g., certain histocompatibility antigen types) have been implicated.

Thyroid dysfunction may have an impact on glycemic control in the patient with diabetes. Hyperthyroidism is typically associated with worsening of glucose intolerance, whereas hypothyroidism has little effect on glucose tolerance in most patients, but may occasionally decrease a diabetic patient's insulin requirement. Although a number of factors may contribute to impaired glucose tolerance in hyperthyroidism, the literature is contradictory. It is clear, however, that there is more rapid gastrointestinal glucose absorption in thyrotoxicosis.

Practically speaking, there are several implications for patients who have both diabetes and hyperthyroidism. First, one must be cautious about diagnosing glucose intolerance in thyrotoxic patients, since glycemic control may improve with treatment of hyperthyroidism. Second, hyperthyroidism should be considered in the differential diagnosis of unexplained worsening of diabetic control. Third, one should anticipate possible worsening of glycemic control in diabetic patients who develop hyperthyroidism and lower blood glucose levels with restoration of euthyroidism.

The diagnosis of thyroid disease in patients can be challenging. The common clinical manifestations of poor diabetic control and hyperthyroidism (i.e., fatigue, weight loss despite good appetite, and irritability) may delay the recognition of thyrotoxicosis. Furthermore, in patients with poor glycemic control or other illnesses complicating diabetes, modest hyperthyroxinemia (serum T4 12-14 μg/dl) may be present. At the other end of the spectrum, hypothyroidism may be mistakenly diagnosed in patients with advanced diabetic nephropathy who may have fatigue, pallor, edema, and weight gain suggesting thyroid hormone deficiency. Matters may be confused further by the low serum thyroxine concentration that typically accompanies chronic renal failure. Indeed, diabetes itself or other secondary systemic complications may cause all of the typical constellation of changes in thyroid function tests that occur in patients with nonthyroidal illnesses: a low serum T3 due to impaired extrathyroidal T4-to-T3 conversion, a low serum T4 due to impaired T4-plasma

Table 2. Potential side effects of beta-blockers in patients with diabetes

- Impaired glucose intolerance in noninsulin-dependent diabetes mellitus
- Blunted perception of hypoglycemia
- Delayed recovery from hypoglycemia
- Hyperkalemia with co-existing hyporeninemic hypoaldosteronism

protein binding, and an inappropriately low serum TSH concentration.

In practice, physicians must maintain a high index of suspicion for thyroid dysfunction in patients with diabetes. The serum TSH measurement in a highly sensitive immunoassay (i.e., one with a detection limit less than 0.1 mU/L) is generally the most reliable single screening test for thyroid disease in patients with diabetes. All common forms of hypothyroidism and hyperthyroidism can be detected with this test. In addition, patients with subclinical hypothyroidism and hyperthyroidism, who have serum T4 and T3 concentrations within the normal range, can only be diagnosed with this approach.

There are certain special considerations in the treatment of thyroid disease in patients with co-existing diabetes. Beta-adrenergic blocking agents, which are often used for symptomatic relief in the management of hyperthyroidism, have certain potential side effects in the patient with diabetes (**Table 2**). In general, it is desirable to pursue a definitive cure of hyperthyroidism due to Graves' disease or a toxic nodular goiter with radioactive iodine therapy.

When treating hypothyroidism in a patient with diabetes, the physician should remember the potential for silent underlying coronary artery disease that might be exacerbated by thyroid hormone replacement. Diabetes and associated hypertension and hyperlipidemia are, of course, potent risk factors for atherosclerosis. The introduction of L-thyroxine replacement may, in a small minority of patients, worsen angina or even provoke myocardial infarction due to the increase in heart rate and myocardial contractility affected by thyroid hormones. Consequently, it is best to "start low and go slow" in this setting—prescribing an initial 0.025 mg per day dose and increasing it at monthly intervals in 0.025 mg increments while monitoring the patient's clinical status and serum TSH concentration.

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JAMES H. MERSEY, M.D.
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A Clinical Moment with Diabetes

"A Clinical Moment with Diabetes" is a monthly feature of the Maryland Medical Journal. The format normally includes the presentation of a clinical problem or mini case study, followed by a solution or response. Physicians interested in providing submissions for publication consideration should contact the department editor: James H. Mersey, M.D., Physician Pavilion, 6565 North Charles St., Suite 411, Baltimore, MD 21204 (410-828-7417).

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Botanists have gathered an assortment of ornamental plants and consigned them to the order of Roses (Rosales). Among them are flowering cherries, mountain ash, hawthorn, roses, and spirea.

The family Spirea contains over 100 shrubs indigenous to the temperate zone. The leaves of one of them, Spirea Ulmaria, yields an extract which has an unpleasant, tart flavor. Researchers for the Bayer company in Germany named it *spiroylige saure*. In the late 19th century, they discovered its principal ingredient was **salicylic acid**.

In 1899, Felix Hoffman and Hermann Dreser produced an acetylated derivative of **salicylic acid** from coal tar. They found it was analgesic (Greek *an* 'without' + *algesis* 'sense of pain') and antipyretic (Greek *anti* 'against' + *pyretos* 'fever'). Searching for an appropriate name for this product, they borrowed an "**A**" from acetyl, "**spir**" from *spiroylige saure*, and terminated the word with "**in**." They named it **aspirin**. The Bayer Corporation began marketing the stuff in 1905, and it soon became the world's largest selling over-the-counter remedy.

Shortly thereafter, the Bayer Company was purchased by the huge German cartel, I.G. Farben Industries, which established an American subsidiary. After World War I, however, the American Bayer Company was condemned as spoils of war. It was then sold to the Sterling Drug Company of New York City, which continues to market Bayer Aspirin to this day.

The Sterling Drug Company is also noted for its manufacture of D-Con, a mouse and rat poison containing **warfarin**. **Warfarin** is the proprietary name for **coumarin**, an anticoagulant that depresses clotting factors II, VII, IX, and X by interfering with gamma carboxylation of precursor proteins. **Coumarin** is found in the tonka bean, a fragrant, almond-shaped bean used in many perfumes and obtained from several leguminous trees of South America. The Tupi Indians of Brazil call the tonka bean *cumuru*, from which their Portuguese conquerors derived *coumarou*—and thus **coumarin**.

In 1924, a hemorrhagic disorder was reported in cattle that had ingested spoiled sweet clover. Investigation revealed that bishydroxy**coumarin**—or **dicumarol**—was responsible. In 1948, Karl Paul Link, a biochemist at the University of Wisconsin, synthesized **coumarin**, a more potent congener. He secured a patent on the drug and named it **warfarin**, an acronym for the **W**isconsin **A**lumni **R**esearch **F**oundation plus coum**arin**.

The age of anticoagulants had dawned for man—and rats.

The I.G. Farben Company of Germany is distinguished for other accomplishments. Its name derives from *Interessen Gemeinschaft **Farben**industrie Aktiengeselschaft*—Community of Interests of Dye Industries, Incorporated. One of the world's largest syndicates, it has embraced more than just dye and chemical enterprises. At one time, it controlled more than 500 companies in 92 countries and was a signatory to over 2,000 cartel agreements. During World War II, Farben controlled

over 900 chemical factories in Germany. It supplied 85 percent of the explosives and virtually all of the tires used by the Nazi army—presenting Hitler's government with a yearly bill for over one billion dollars. (**Nazi**: an acronym for *Nationalsozialistiche Deutsche Arbeitpartei*—the National Socialist German Workers' Party.)

There was another, less well-known, aspect to I.G. Farben's diverse operations. They developed a gas called **Zyklon-B**.

The chemical technique required to produce the gas was actually old and quite well known. It had been developed much earlier in Prussia. There, in 1704, a stunning blue chemical pigment was first produced. The world called it **Prussian blue**, and it continues to be one of the major tints used in the dye and printing industries today.

Prussian blue is ferric ferrocyanide. Using a similar production method, I.G. Farben patented a process for manufacturing solid crystals of hydrogen cyanide. They called this product **Zyklon-B**. It was extensively used as a rodenticide and pesticide. Hitler considered that an appropriate irony. It became the decisive instrument for his *endlosung*—the Final Solution.

Between 1941 and 1945, the Nazis undertook a massive, systematic, state-sponsored effort to kill every Jew in Germany and within the German-occupied territories. The program was run by the **SS** under the direction of Heinrich Himmler, Reinhard Heydrich, and Adolph Eichmann. (**SS**: abbreviation for *schutzstaffel*. These men were Hitler's black-shirted guards. The term means "protective ranks." They were distinct from the **Gestapo**, which was the secret state police—an acronym derived from *Geheime Staatspolizei*.)

Seven concentration camps were chosen to conduct methodical genocide: Auschwitz-Birkenau, Treblinka, Belzec, Sobibor, Chelmno, and Stutthof. The method was quite precise. Prisoners were led to *brausebader*—showerbaths. They were stripped naked and escorted into a communal chamber. The doors were then closed and bolted from the outside.

Next, amethyst-blue crystals of **Zyklon-B** were dumped into the air shaft. Almost immediately, hydrogen cyanide (HCN) gas was released by sublimation. **Prussic acid**, as it had been formerly called, drifted into the closed room. (**Prussic acid**, the original term for HCN, was originally obtained from **Prussian blue**.) At a lethal dose of one milligram per kilogram, death comes quickly. The trivalent iron within cytochrome oxidase binds tightly to the cyanide ion. Intracellular oxidation is completely incapacitated. A few grand mal seizures are soon followed by apnea and death.

The arterialized venous blood often gave the dead a grotesquely robust facial color, as they were dumped into mass graves.

After the war, 24 I.G. Farben executives, who had knowingly participated in these obscenities, were charged with enslavement and mass murder of foreign workers. Their trial represented the first such indictment of business executives in history. Because of mounting anxiety that destruction of Farben Industries might worsen Germany's post-war economy, the case was allowed to lapse. The executives were released.

On December 9, 1946, 23 Nazi doctors were brought before American Military Tribunal Number 1 in Nuremberg. They were charged with war crimes and crimes against humanity. Among them were university professors, the chief administrative (medical) officer of the Reich Chancellery, chief of medical services for the armed forces, chief of the institute for military research, and Hitler's personal physician, Karl Brandt. Seven physicians were executed, five received life terms.

Physicians, it seems, are really not much different from other citizens. We are heroes or villains—or both—depending on your perspective.

Let me illustrate. There were two men whose names I'm certain you remember. One was a Frenchman named Jules, the other a German named Hans. They were contemporaries during the Second World War.

Hans was born in Leipzig, where he received his medical degree. After post-graduate training in bacteriology in Paris and London, he became a lecturer at the Institute of Hygiene in Konigsberg. For a while, he worked directly with August Paul von **Wasserman**, famous for having developed the test that bears his name.

In 1914, Hans discovered the leptospiral organism that causes **Weil's** disease—*L. icterohaemorrhagicae*. (H. Adolph **Weil**, 1848-1916, described the clinical manifestations of the disease in *Deitscjes arcjov für Klinische medizin* 1886; 39:209–32. Today, we refer to it simply as **leptospirosis**.)

During World War I, Hans was stationed on the Balkan front with the First Hungarian Army. There he observed a unique disorder in a young lieutenant, which he soon reported in *Deutsche Medizinische Wochenschrift* 1916; 42:1535–36. He referred to it as spirochetal arthritis.

Hans was mesmerized by Adolph Hitler. In 1932, he signed an oath of allegiance and became a member of the Nazi party. He received several appointments to Hitler's government and was

finally chosen to be the director of the Health Department for the State of Mecklenburg.

Following the Allied victory in 1945, he was briefly imprisoned in an American prisoner-of-war (POW) camp. When it was ascertained that he had not been associated with the Nazi extermination camps or any of the human experiments, he was released. In 1969, at age 88, Hans died peacefully at his country home in Hesse.

Jules, on the other hand, was a fifth-generation physician born in Rouen, France, where his father had been professor of anatomy. After medical school, he began postgraduate work in neurology, studying with **Landouzy** and **Dejerine**. (In 1884, Louis Theophile Joseph **Landouzy** and Joseph **Dejerine** described the facio-scapulo-humeral form of progressive muscular dystrophy known by their mutual eponym.) Several years later, Jules became chief of the clinic and chief of the laboratory at the famous Saltpetriere Hospital. In 1922, he was first to describe a pheochromocytoma of the adrenal medulla.

During World War II, he became active in the French underground. He and his son Jacques rescued and concealed Allied fliers, then smuggled them across the border to Spain and freedom.

One night Jacques did not return home. The following day, the SS arrested Jules, his wife, and his youngest son. After three months in prison, the three were released on insufficient evidence.

Jacques, however, had been taken to concentration camp Dora (Mittlebau), where he was tortured and executed.

Jules never quite recovered from the loss of his courageous son. In 1952, after several transient ischemic attacks (TIAs), he died of congestive cardiac failure.

You may recall that **Jules Tinel** described two signs identified with his name. One is distal tingling on percussion over sectioned nerves, indicating regeneration. The second, percussion over the carpal tunnel with resultant tingling in the distribution of the median nerve, in patients with the carpal tunnel syndrome. Each is referred to as **Tinel's sign**.

And **Hans Reiter** described the urethritis, arthritis, and conjunctivitis of the syndrome bearing his eponym—**Reiter's syndrome**. He is also known for the **Reiter complement fixation test** for syphilis.

Two respected physicians on two sides of a geographic border. On two sides of a military contest. On two sides of a moral issue.

It appears that principles are not always black or white.

Or rose red and Prussian blue. ■



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When the Doctor is Out

Andrew E. Mance, M.D.—Poet

"The best thing about being a physician is having a life of service to my fellow man, a most interesting species."

Dr. Andrew Mance appeared in person just as he looks in the frontispiece photograph in his book of verse, *Thoughts of a Country Doctor, an Immigrant's Son in Poetry.* He rose to greet me in the lobby of Sacred Heart Hospital in Cumberland, and we found a quiet corner in the hospital library to discuss how his 54-year medical practice inspired him to write three volumes of verse.

He began with a story from early in his medical career to illustrate his philosophy of practice. "Medicine, as my mother taught me, was based on the principle that people need me. One night when I had office hours, my waiting room was full, and people were still coming in at 9:30. Back then, some people would go to the movies and then come into the office after the movies at 11 o'clock; I wouldn't finish till 2:30 in the morning. So on this night, my two secretaries were fussing at me, saying why don't we lock the door. I locked the door. Well, my mother found out; the next day, she came to my office. She said, 'You! Do you remember how hard we worked in order to get you through school so that you could help people? So now you're going to lock the door so people can't see you!' That was all she needed to say."



Figure 1.
Dr. Mance examining a child in 1939 during his internship at Chester Hospital in Chester, Pennsylvania. He earned $2 per week as a medical student and $15 per week as an intern.

He summarized his philosophy in these words: "Real medicine is exactly where it was years ago. In real medicine, you think of the patient. You think of yourself as a servant. If you are a good servant, you get paid." The 78-year-old general practitioner from Oakland has drawn inspiration for his poetry from his long experience as a good servant in medicine.

Dr. Mance expressed some doubt that what he writes is actually poetry. He started writing when an office nurse told him that he should write down the wise and original sayings that he often shared with his staff. She called them "profundities." Dr. Mance protested that he did not think he had said anything profound; he thought his expressions were plain common sense.

When he decided to act on the nurse's advice, he discovered that by the time he had time to write it down, he could not remember what he had said exactly as he had said it. So, he began to keep an index card handy in his shirt pocket for when inspiration hit. Since then, he has filled 10 or 12 notebooks with his common sense sayings, his apothegms.

How the notebooks full of apothegms evolved into verse was another story. One day, when his eldest daughter "gave him some grief about something," he wrote down in one of his notebooks what he was thinking. He looked at what he had written and thought, "I can make a poem out of this." In "Potter's Wheel," his first poem, he described the frustration of a potter struggling with clay that has a mind of its own, much as a father struggles with his daughter. Despite the potter's repeated effort to

mold the clay, to work out its imperfections, it becomes what it wants to become.

Potter's Wheel

Lovingly, J caress
Knead
Mold
Pat and
Press
That piece of clay
Place it on the potter's wheel
Work the treadle
Slowly
Then with more vigor
To shape
Into what J deem
A beautiful chalice
A vase
A bowl
A cup.

It flows
Slowly
But surely
Into another shape
J take it
Knead
Smack it;
Again,
To shape it.
The wheel slowly turns
Now more rapidly
Water J add
To smooth
A rough spot here
Another there,
Gently.

From fatigue
My foot is aching
But J turn on
Adding
Subtracting
A work of art
J plan
The proper shape
The proper sheen
To get that fine finish
That beauty
That perfection.

J turn around
To find
That beautiful cup
Refuses to be
A cup
That beautiful vase
Has changed its shape.
The clay flows,
To my like or dislike,
A life its own
It wants to be
A pitcher.

My foot on the treadle
Weary
The hands blistered
Better than anyone
The imperfections
J see.

The fire of life
Has fixed
The clay
Proud of the pitcher
Yet wonder J
How much more beautiful
Might
The chalice
Have been.

From *Thoughts of a Country Doctor, an Immigrant's Son in Poetry,* Volume 1

"That is where the poetry started, such as it is," Dr. Mance concluded. "I decided prose uses a lot of words, and after awhile people get tired of reading it. I thought if I put down the least amount of words to get my thought across, I could build it into a poem, and maybe someone will read it." With that in mind, the lean, clean form, the few



Figure 2.
Dr. Mance stands in front of his first office--a converted restaurant.

Figure 3
Dr. Mance entered the service as a first lieutenant at Fort Meade, Maryland. He was promoted to captain and, ultimately, to major.



words in short lines that characterize all his poems evolved.

"When I forget to think of each person as an individual—I am in Trouble—People are not patterns"
"Empathy—The beginning of understanding"

From *Thoughts of a Country Doctor*



Figure 4
As Eleanor Callis looks on, Dr. Mance holds Andrew Clark, the last of approximately 2,000 babies he delivered at the hospital or at home.

Dr. Mance declared that his specialty has always been people. He could never look at a patient as a cold or a sore toe. He looked at the entire patient.

"When a patient comes to me, I begin to evaluate that person immediately. I see how he walks, how he appears, how he is dressed. I need to know his religious affiliation. I need to know the financial condition. I need to know all this, but it isn't that I am going to treat him any differently. I treat to the best of my ability."

Dr. Mance observed that he is now in the sunset of his practice, but he still sees 40 to 50 patients in a four-day week. Most of his current patients are old friends. He reminisced about past times in his practice, which he opened in 1939. Oakland, the county seat of Garrett County on the western-most edge of Maryland, had four other doctors at that time, and one of these told him there was no room for a fifth. About 24 physicians practice in the town now, he observed, and Oakland has room for all of them.

Just 16 months after beginning his practice, he built his own office building, but only a few months later, in April 1941, the army reserve called him into service. Fifty-four months later, on November 5, 1945, he reopened his office at the end of World War II; his waiting room filled with as many patients as he had on the day he had left.

"I hope I never retire—I can't imagine being without work"
"Sleep in a hurry"

From *Thoughts of a Country Doctor*

"The least amount of time I spent between people was the best," Dr. Mance stated. "I could run from patient to patient, but when I sat down with a patient, it was different. Then I had time. In my office, each patient got 10 to 15 minutes of my undivided attention."

He recalled often having an office full of patients, as many as 20 people sitting in his waiting room, causing waits as long as an hour and a half. He remembered the patient who came in one time and said, "The last time I was here I was sick, and I had to wait. I'm better now. I don't have to wait this time." So he went back home. He also remembered the three ladies who came prepared with their knitting for a long wait. As they knitted and chatted on that warm spring day, another patient, "one of these country boys still wearing three heavy shirts for wintertime, came out of the office." One of the ladies looked up and said, "Gee, he's been here since last winter."

In his prime, Dr. Mance saw from 60 to 70 patients in a day. "You say I couldn't do it?" he challenged, "I couldn't if I only worked an eight-hour day. But if I figured the minimum of time I could give a patient was 10 minutes, I would see five to six patients in an hour. If I saw 70 patients, that figures out to a lot of hours. I remember day

after day, week after week, month after month, working 20-hour days or even longer. I remember working 24 hours straight, right into the next day, but that was not often; that was a rare occasion. But it was nothing to work 16, 18, 20 hours a day, and that was six days a week. I used to make as many as 10, 12, 15 house calls. I remember one time delivering three babies on one circuit, and I remember almost meeting myself out in the county from where I started to where I ended up. It's been fun in the sense that I learned to work as a youth," Dr. Mance observed, "and I cannot imagine wasting time."

"Poverty when tempered with honesty creates vision"
"My father and mother left me stepping stones so that I may walk in the present with my feet more dry...."

From *Thoughts of a Country Doctor*

Dr. Mance thought back to his boyhood to describe his parents, Croatian immigrants, who gave him his strong work ethic. Having no more than grade school educations themselves, they strove to provide him with an education.

His father worked in the coal mines of western Pennsylvania for about 20 years before he went into sawmilling. "I worked in my father's sawmill beginning at age 11, firing the steam boiler. At age 12, I drove a team of horses logging in the woods, and I worked every summer vacation at the sawmill until my last year in school. We worked 10 hours a day in all weather." "My father was a brilliant man," Dr. Mance stated. "I am but little, if at all, smarter; see what he did with so very little and how little I do with so-so much."

Dr. Mance described his mother as "illiterate but brilliant in many ways." "Mother kept boarders practically all her life. Around 1908, she had 32 boarders plus my father, my brother, and herself. It was nothing to have 6, 8, or 10 boarders, people who worked in the mines or at the sawmill. She took care of them all, feeding them and doing their laundry. When we got another boarder, we built on additional rooms if necessary. We didn't have the amenities, but we had food."



Figure 5
Dr. Mance in his living room, holding his writing board, which he moves from place to place.

Another story came to mind. "During the Depression in 1932, when I came home after graduating from high school, my parents looked gaunt. We had fat back (three inches fat and a quarter inch lean), cornmeal, barley, and potatoes. We were managing. A man came down the road one day and called out to my father, 'Hey Mr. Mance, they're giving out canned foods and hams down at the Stony River bridge for people who don't have food.' My father said, 'We have food. That's for people who don't have food.' That tells what kind of background I came from," Dr. Mance concluded.

He credited his father as the source of the Croatian folk tales that he has preserved in the collection of poems, "Tales by Lamplight," in *Thoughts of a Country Doctor, An Immigrant's Son in Poetry*, Volume II. As a boy, his father heard the stories from his father, who heard them from his father, and so on back for many generations. Some of these folk tales Dr. Mance related to experiences in his medical practice. In

"The Pear Tree," an ancient farmer forestalls Death by tricking him into climbing his unusual pear tree. Once in the tree, Death could not climb down without the farmer's consent. No one could die, resulting in hardship and agony for humankind. Dr. Mance related this story to circumstances he often sees in nursing homes and with patients suffering from terminal conditions; modern medicine sometimes tries to keep Death in the pear tree.

At the close of our interview, Dr. Mance pondered what he would like to accomplish through his writing. He hopes to help his audience, mostly his patients, his family and friends, to stop and reflect, and perhaps even learn from his poetry. By saying much in few words, he tries to leave room for his reader to think. He would like to leave for future generations some of his thoughts, some evidence that he lived.

His poem, "Worth," summarizes well this gentle physician-poet's attitude and demeanor.

Worth

Beware of praise,
Lest it turn your head,
Lead you to stumble and fall.
Know your own worth,
Use it to your fullest —
In humility —
For yourself and
Your fellow man.

From *Thoughts of a Country Doctor, an Immigrant's Son in Poetry,* Volume 1

CORA TETER, M.S.
Ms. Teter is project coordinator of Focused Professional Education at Med Chi. ■

When the Doctor is Out

This column focuses on Med Chi members who, in addition to practicing medicine, have novel hobbies, unconventional interests, or other occupations. If you fit in this category or know of a colleague whom we should feature, please contact Janet Campbell at 410-539-0872 or 1-800-492-1056.

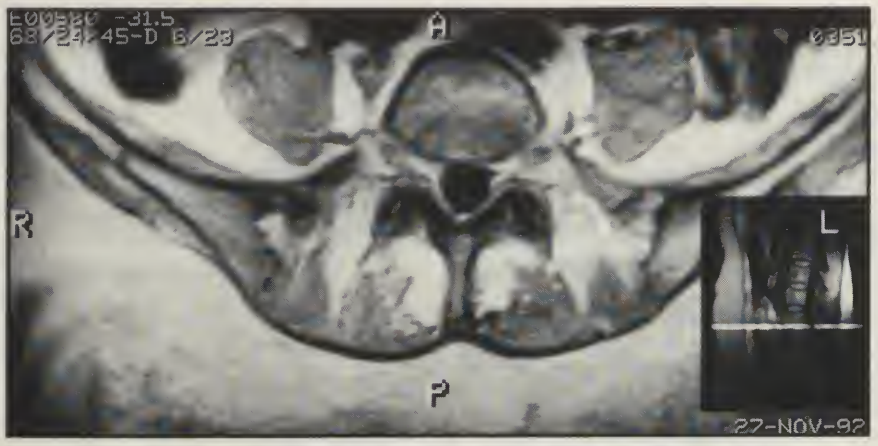
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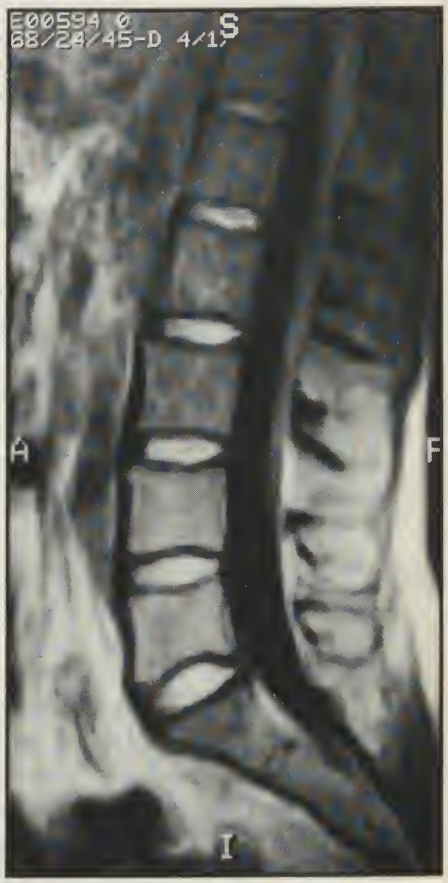
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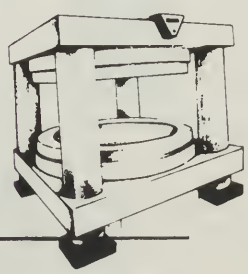
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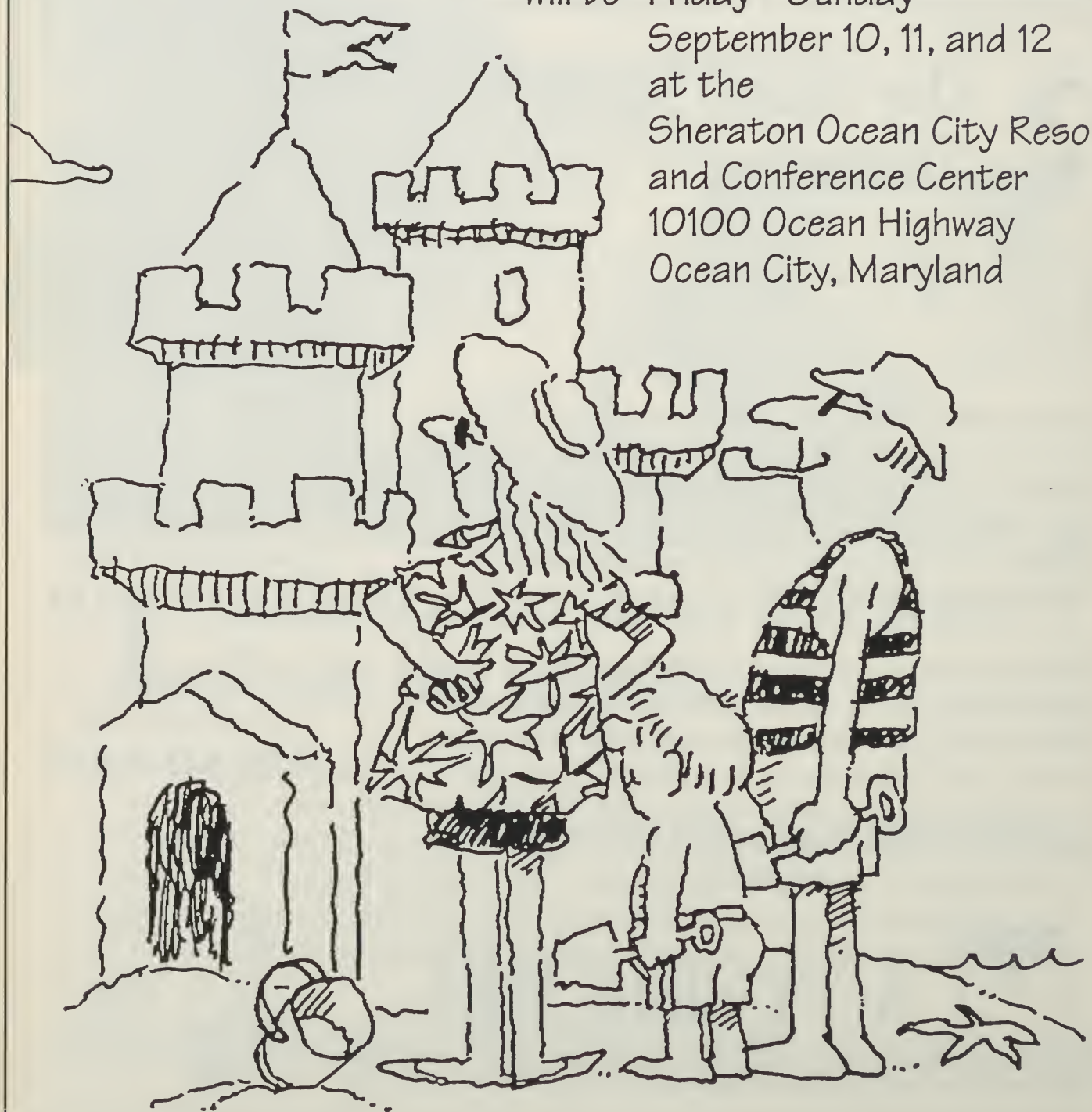
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Book Reviews

The Heart of a Child. What Families Need to Know about Heart Disorders in Children. Catherine A. Neill, Eugene B. Clark, and Carleen Clark. Baltimore: The Johns Hopkins University Press. 1992. 331 pages. $24.95

In 1676, Isaac Newton wrote John Hooke: "If I have seen further, it is by standing on the shoulders of giants." In the presentation of this book, the authors also stand on their predecessors with their multitude of contributions in this exciting field.

The past 50 years have witnessed the creation of a new branch of medical specialization – pediatric cardiology and related surgery. Society still thinks that heart attacks occur only in the older population and does not know that about 8 of every 1,000 children have congenital heart defects (25,000 per year in the United States). During childhood, 2 in 1,000 will acquire a new problem producing a myopathy, valvular disorder, or serious conduction disturbance.

The prime desire of current pediatric cardiologists is the provision of the best possible therapy for the affected child, so that the disordered heart may function well. Because many of the difficulties surrounding intracardiac surgery have been circumvented, the authors can present an excellent game plan to treat affected children.

In this book, written for anxious parents whose children have one or a combination of birth abnormalities, the authors state *"cor ad cor loquitur"* – the heart speaks to the heart. Their comments and advice are consistent with the quotation.

The book has been prepared with a complete grasp of cardiac medicine and pathology. Numerous simple but explicit illustrations help tremendously in an analysis of the problem of immediate concern. An old Chinese proverb reads: "One picture is worth more than ten thousand words." Although the material, at first glance, would seem to be beyond the ken of most lay people, the concurrent explanations of the health care team members involved help to bridge this difficulty.

After reviewing the embryologic formation of the normal heart and how it works, the authors guide the parents into an analysis of the risk factors that may cause the heart to be abnormal. The factors may be of genetic, radiation, virus infection, diabetes mellitus, chemical, medication, alcohol, or "hard" drug origin. These determinants may be discussed in retrospective or prospective fashion.

Cardiac medicine and surgery have made tremendous strides since the patent ductus arteriosus was first tied by Robert Gross and Clarence Craaford. The invention of the heart-lung machine for cardiopulmonary bypass, ultrasound and magnetic resonance imaging (MRI) for more precise viewing, and catheterization for greater definition of the defects have each added quantum jumps to diagnosis methods. Just prior to these developments, thoracic surgeons were only just learning how to operate in the thoracic cavity safely.

For ease in orientation, the book divides all cardiac defects into categories:

- Not requiring treatment, such as innocent murmurs and benign mitral prolapse
- Needing emergency surgery after birth, such as cyanotic heart defects
- Requiring treatment with medications or catheterization, but not surgery
- Treated surgically in infancy or childhood as coarctation of the aorta, patent ductus arteriosus, atrial septal defect, ventricular septal defect, aortic valve stenosis, or tetralogy of Fallot

A short case report about each of the many defects provides easy reading for

parents who may, with proper help, visualize the difficulty their child has. The book also attempts to care for the day-to-day needs of the parents as they await the outcome of their child's operation.

Treatment, of course, does not stop when the operation is completed, as these children need prolonged follow-up. Indeed, the efforts of the health team are required more than ever if the treatment fails or does not produce a completely favorable result. The results of therapy today are most encouraging, for in the late 1930s, only a few people with the tetralogy of Fallot reached middle age. Now there are hundreds or perhaps thousands.

Despite the successes, death still occurs in these children, with the most hazardous period being in the first year, particularly the first month. When the death of such a child occurs, parents often feel abandoned in their grief. The book suggests that the health care team may alleviate the mental trauma by attending the funeral, remaining available if new questions arise, and keeping a member of the support group accessible. Grieving is long, slow, and exhausting. For some parents, help may also be available from community support groups; sharing sadness can be a form of holistic healing.

The book states that although children should not be overloaded with complex information, they should know the name of their exact defect and know that a follow-up examination, like automobile maintenance, is needed periodically. Here again, the health care team may be of unqualified assistance.

After their consideration of damaged hearts, the authors conclude with suggestions to maintain a healthy heart. This problem actually is of far greater significance than the correction of mechanical defects. Eliminating the malignant effects of smoking, eating a proper diet, and having blood pressure measured annually are facets in keeping the heart healthy. Family, teachers, and school nurses may be part of an effective cardiology prevention team.

All cardiac abnormalities begin in childhood, many before birth, although they may not be recognized until adulthood. Coronary artery disease occasions the loss of 8 to 10 times more productive years of life than congenital heart defects. Any protective effort exerted in the early years should prove most beneficial later.

The Heart of a Child is an excellent medical book because it provides a reference to a specific defect for interested parents. A much greater audience will be presented by medical students and medical practitioners who are not cardiologists. In addition, all public libraries should add it to their collection of medical books. Truly, this book about hearts is written in a heart-to-heart manner.

JOSEPH M. MILLER, M.D.
Timonium, Maryland

■ ■ ■

Planning for a Healthy Baby. A Guide to Genetic and Environmental Risks. Richard M. Goodman. New York: Oxford University Press. 1986. 169 pages. $16.95

With this book, Goodman, an internationally known geneticist, makes a significant contribution to perinatology, a branch of medicine now experiencing vigorous growth. In a question-and-answer format, he presents specific information about the leading problems associated with pregnancy.

Many of the diseases of childhood that previously entailed a considerable mortality have now been abolished or markedly ameliorated. Until recently, however, the field of genetic errors remained relatively untouched. Now, medications, drugs, smoking, alcohol, and age are being explored as etiologic agents for untoward fetal changes.

The author believes that all couples should plan for a pregnancy before the fact and seek medical advice, particularly if a familial problem has appeared previously; anyone may be the parent of an abnormal child. Over 3,000 human genetic disorders have been recognized and cataloged. The collected statistics emphasize why increasing attention must be given to the preventive aspects of obstetrics and pediatrics. In the United States, 1 in every 100 pregnancies is associated with a disorder of the single-gene type, and 1 in 160 fetuses has a chromosomal abnormality.

The author presents in-depth information about the most common birth defects. The subjects of environmental and genetic factors, maternal illness, diagnostic and therapeutic procedures, and ethical issues are considered in detail, with particular attention being given to chromosomal abnormalities. The effects of increased parental age, nondisjunction, exposure to radiation and infection, and inherent structural defects are reviewed. Specific regard is given to Down's syndrome, cystic fibrosis, phenylketonuria, muscular dystrophy, hemophilia, sickle cell disease, and Tay-Sachs disease.

New examinations devised during the last 20 years help decipher some of the puzzles of pregnancy. Ultrasound, which avoids the use of x-ray, has offered a tremendous aid in imaging the fetus. The modus operandi and measurement of alphafetoprotein have been helpful in the diagnosis of neurologic defects. Amniocentesis and chorionic villus sampling are further examples of perinatal investigational technology.

Pearls of knowledge are plentiful. Two are related for illustration.

1. Neural tube defects occur in 1-2 per 1,000 newborns in the United States. Specific causes for the appearance of these defects are unknown, but strong suspicion exists that certain environmental factors, a folic acid

deficiency, or some anticonvulsant drugs may be involved. If the malformation has been present in the family previously, the risk is between 1:20 and 1:200, depending on the nearness of the kin involved. At the moment, such defects may be recognized prenatally by determination of alphafetoprotein in the amnionic fluid at a specific period (15 to 18 weeks of gestation) in the maternal blood serum. An elevation should lead to an ultrasound examination for confirmation.

2. Estimated rates of having a child with Down's syndrome rise remarkably with maternal age. At age 20, the risk is 1:365, but at 40, it is 1:12. This rate carries a distinct warning to older people who contemplate having a child.

The contents of the book are drawn from the personal experiences of a specialist in clinical genetics. The publication concludes with a check list of factors that may influence fetal growth, a suggestion for basic examinations in planning for a child, addresses from which additional information may be obtained, selected book references, a glossary of medical terms, and a good index.

Ostensibly written for actual or prospective parents, the book will find greater use by medical students and general practitioners. Individual couples will only be interested in a particular segment of this encyclopedic volume. Every medical library should include the volume in its collection.

JOSEPH M. MILLER, M.D.
Timonium, Maryland ■

HEALTH CARE RESEARCH INSTITUTE, INC.

The Health Care Research Institute, Inc., a not-for-profit corporation will accept proposals for research related to the assessment of health care.

The Health Care Research Institute recognizes that the environment in which medicine is practiced has changed and that there is a need for obtaining information or data on how quality medical care can be provided on a cost-effective basis. Funds will be provided for grants in research and for training in such health care issues as the following: Decision analysis; the better understanding, interpretation, and application of clinical trials and their use in reaching appropriate decisions; proper cost-effective interventions in health care; appropriate decision making with regard to elderly patients; health care policy including reimbursement methods and the effect of such reimbursement mechanisms on proper decisions on diagnostic and therapeutic approaches to the care of patients; on approaches to containing the escalation of health care costs; on studies relating to the use of outcome analysis on the evaluation of health care; and on innovative approaches to evaluate the quality of health care.

Examples of areas of potential research include studies related to the assessment of the quality of care, cost-effectiveness of health care decision analysis, and guidelines for appropriate care.

Since the funds are limited, the total support for each grant or fellowship cannot exceed $20,000. No funds can be provided for overhead or for the purchase of capital equipment. Because of the limited funds available, priority will be given to the support of research fellows involved with preliminary innovative studies and to original studies by experienced investigators. Applications will only be accepted from not-for-profit institutions.

Applications are to be submitted by July 1, 1993 for support to begin September 1, 1993. Initial and interim review, and progress reports will be performed by the Board of the Health Care Research Institute which will also be responsible for the selection of all projects to be supported.

Applications are to be mailed to the following address:

HEALTH CARE RESEARCH INSTITUTE, INC.
P. O. BOX 4703
TIMONIUM, MARYLAND 21094

Applications should include the protocols for study, and relevant experience and bibliography of the investigator.

A Look Back

MMJ: 25 years ago

Bart Gershen, M.D.

Dr. Gershen is a cardiologist in Rockville, Maryland.

It was 1968. Lyndon Baines Johnson was in the White House, Spiro Agnew was the honorable governor of our fair state, and Richard D. Bauer, M.D. was president of the Med Chi Faculty.

It was the year of the Tet offensive, the capture of an American ship named Pueblo, and the finale of a small Vietnamese village called My Lai.

On March 31, Lyndon Johnson stunned the nation by announcing his decision not to run again for the presidency. Four days later, Martin Luther King, Jr. was shot to death in Memphis, and three months later, Robert Kennedy was killed in Los Angeles.

The Apollo VIII astronauts became the first men to orbit our moon. On Christmas Eve, they read from the book of Genesis and sent their prayers for peace to an earth staggered by these maniacal circumstances.

That year, the *MMJ* carried advertisements for Thorazine (chlorpromazine) to prevent senile anxiety, Vistaril (hydroxyzine pamoate) for alcoholism, Tuinal (sodium secobarbital) for sleep, Geroniazol TT (pentylenetetrazol and niacin) for geriatric patients, Bamadex Sequels (dextro-amphetamine sulfate) for appetite control, TAO (troleandomycin) for respiratory infections, Solfoton (phenobarbital and bensulfoid) for sedation, BSP disposable units (sulfobromophthalein sodium) for liver function studies, Tybatran (tybamate) for tranquilization, Mellaril (thioridazine) for the agitated business executive, and deserpidine and pargyline for the hypertensive patient.

A psychiatric text, *The Neuroses*, was published that year by Henry Laughlin, M.D. and received a favorable review in the *Maryland State Medical Journal.*

The Council voted to support legislation that would remove abortions from the Maryland criminal code, declared the use of bank credit cards for medical payment to be unethical, and voted a maximum of $2,000 for actuarial assistance to be used—if needed—in discussion with the state legislators.

The annual Med Chi meeting was held at the Sheraton-Belvedere Hotel in Baltimore. The rates were $17.50 for a twin-bedded room per night. Suites were $40.00.

Among the featured speakers was the famous cardiovascular surgeon Arthur M. Vineberg of Montreal who detailed his innovative, world famous technique for correcting coronary artery disease—the Vineberg procedure.

1968 was also the year Queen Elizabeth II bestowed the Order of the Garter upon her eldest son Prince Charles. It was also the year of Paul Simon's famous "Mrs. Robinson."

How appropriate. ■

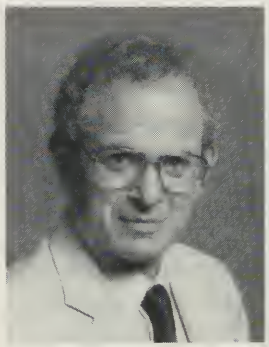
Members in the News



BRUCE W. BERGER, M.D. has been re-elected vice president of Sinai Hospital's medical staff. Dr. Berger, a urologist, is a former president of the medical staff and has participated on many medical committees managing the health care of patients. He is an assistant professor of surgery in urology at the University of Maryland Hospital, and has authored numerous papers and presentations.



GERARD A. GARGUILO, M.D. has been elected chairperson of the Medical Executive Committee (MEC) of Sinai Hospital. MEC comprises departmental chiefs and attending physicians whose subcommittees oversee every phase of patient care at the hospital. Dr. Garguilo, a surgeon, was on the MEC President's Advisory Committee last year, advising on policy issues requiring discussion with the hospital administrators. With a keen interest in severe injury, Dr. Garguilo served as director of the Trauma Service, and chaired the hospital trauma and disaster committees. The latter group closely supervises the efficiency of medical and support teams responding to major accidents in Sinai's region. Dr. Garguilo was assistant surgeon-in-chief until last year, when he went into private practice. He specializes in breast disease and breast cancer surgery. He is a clinical instructor in surgery at Johns Hopkins University School of Medicine, and a fellow of the American College of Surgeons.



GERALD A. HOFKIN, M.D. has been re-elected president of the medical staff at Sinai Hospital. In this capacity, Dr. Hofkin represents almost 1,000 physicians when conferring with the hospital administrators and the board of directors. A gastroenterologist, Dr. Hofkin has been associated with Sinai since 1963, when he served part of his residency. He has served Sinai and the medical staff in many volunteer capacities. He is an assistant professor of medicine at Johns Hopkins University School of Medicine, and clinical assistant professor of medicine at University of Maryland Hospital. He is a diplomate of the American Board of Internal Medicine, and fellow of the American College of Gastroenterology and American College of Physicians. He instructs medical residents in gastroenterology at Sinai.



MELVIN L. KELLER, M.D. has been re-elected to serve his second year as vice chairperson of the Sinai Hospital Medical Executive Committee (MEC), which oversees all phases of patient care at the hospital. Dr. Keller has been anesthesiologist-in-chief at Sinai since 1976, and is medical director of the intensive care unit and respiratory care division. He is also chairperson of the Cardiopulmonary Resuscitation Committee and serves on the Patient Care Committee. Dr. Keller is a fellow of the American College of Anesthesiologists and diplomate of the American Board of Anesthesiology. He is an assistant professor in anesthesiology/critical care medicine at Johns Hopkins University School of Medicine, and an associate clinical professor of anesthesiology at the University of Maryland School of Medicine. Dr. Keller is one of the earliest members of the Society of Critical Care Medicine. He is a past chairperson of the hospital consultation subcommittee and education committee of the American Lung Association of Maryland.



WILLIAM R. LEAHY, M.D., on a volunteer basis, is instructing a Home Health Aide Program that he developed in cooperation with the Prince George's County Medical Society for students at Bladensburg High School. The first of its kind in the United States, the program prepares students for placement with regional home care agencies. Upon completion of the course, students become eligible to take a state certification exam, which they must pass to obtain employment as home health aides. Dr. Leahy, a practicing neurologist in Maryland for over 15 years, identified a growing need for skilled home health care providers in his community, particularly for Alzheimer's patients. He also saw a critical need for career training for high school students who lacked skills for productive employment. As founder and moderator of the Greenbelt Alzheimer's Support Group, Dr. Leahy has done extensive research on the effects of Alzheimer's disease on the family unit. He recently completed a year and a half of investigative research on effects of a trial medicine on Alzheimer's patients. Dr. Leahy is a fellow of the American Academy of Psychiatry and Neurology and the American Board of Pediatrics. He has also served as the president of the Maryland Neurologic Society. He is an examiner for the American Academy of Psychiatry and Neurology and serves on the professional board of the National Capital Epilepsy Foundation. He is an assistant professor of neurology at Johns Hopkins Hospital and an attending neurologist at Doctors' Community, Greater Laurel-Beltsville, and Washington Adventist hospitals. ■

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New hospital opening late Spring of 1993 on Maryland's Eastern Shore, serving a dynamic community on the Atlantic Ocean. We have opportunity for BC/BP, residency trained physicians in Emergency Medicine. Excellent salary and benefit package. Qualified candidates send C.V. to James A. D'Orta, M.D., 199 Lionhead Court, Baltimore, MD 21237. Fax or Tel: (410) 686-2124.

PHYSICIAN PLACEMENT SERVICE

The Medical and Chirurgical Faculty of Maryland maintains a Placement Service for the convenience of Maryland physicians, hospitals, and communities in search of candidates for positions available in our state. A detailed description of such opportunities should be forwarded to:

Physician Placement Service
1211 Cathedral Street
Baltimore, MD 21201
410-539-0872
1-800-492-1056

Physicians wishing to locate in Maryland are invited to submit a résumé to be kept on file with the Physician Placement Service. Candidates are requested to inform the Faculty when they are no longer available for consideration for opportunities in Maryland.

MMJ **announcements for physician placements in the classifed advertisements are charged at the regular classified advertising rate.**

Auxiliary

Georgia Chaconas Lizas: 1993-1994 auxiliary president

Georgia Chaconas Lizas is taking over the reins as president of the Auxiliary to the Medical and Chirurgical Faculty of Maryland for the 1993-1994 year. It is the first time there has been a state president from Frederick County.

Mrs. Lizas was born and raised in Washington, DC. She received her bachelor of science degree from the University of Maryland. After graduation, she taught secondary school in Prince George's County. She then ran her very successful family business in Washington, DC until she moved to Frederick in 1970. Georgia remains a member of St. Sophia Greek Orthodox Cathedral in Washington.

Her husband, Dr. Peter C. Lizas, a native of Athens, Greece, graduated from the University of Athens Medical School. After serving as a doctor in the Greek army, he spent two years in England completing a residency in orthopaedics. In 1964, he visited his brothers in Washington, DC, and they convinced him to stay. He retrained at the George Washington University, completing a surgical internship and two-year residency in anesthesiology. Since moving to Frederick in 1970, Dr. Lizas has been in private practice, working out of Frederick Memorial Hospital. Dr. Lizas is an active member in the Frederick County Medical Society, where he is currently serving as treasurer.

Dr. and Mrs. Lizas have three children, "plus one." In May 1993, their daughter Rania will receive her masters of public administration degree from the George Washington University. Their son Constantine and daughter Eleni attend Gettysburg College. Constantine, a chemistry major, will also graduate in May. He plans to pursue a graduate degree as well. Eleni starts her junior year this fall; her interests are in archaeology and classical studies. Their "other son" is Angelos Manganiotis, a medical student at the University of Maryland. Angelo has been staying with the Lizas family since 1988 because his family lives in Greece.

Mrs. Lizas has always been a very active community member. A lifetime member of the Frederick Memorial Hospital Auxiliary, she has helped with its Christmas bazaars for years. When her daughters were young, she was a Girl Scout leader of troop 11395 for 10 years. While her children attended St. John Grade School in Frederick and St. Marie Goretti High School in Hagerstown, she volunteered her time in various school projects, including setting up mini-courses to supplement the academic curriculum and organizing sports banquets to honor school athletes. She often visits elderly people in nursing homes and has organized several groups of individuals to also visit the elderly. These activities are just a small sampling of the many positive things Mrs. Lizas has done for her community.



Figure 1. Mrs. Georgia Chaconas Lizas, 1993-1994 auxiliary president

Mrs. Lizas has been active with the Frederick County Medical Society Auxiliary since 1984 when she hosted a coffee hour that led to the formation of the auxiliary. She was one of the charter members and was the first president, serving two years (1985-1987). In 1988-1989, she became second vice president of the Maryland auxiliary. She became first vice president in 1989-1990, state treasurer in 1990-1991, and president-elect in 1992-1993.

The theme for Mrs. Lizas's presidency is "Get Involved!" She hopes the auxiliary can grow and do much more important work than ever before. She also hopes everyone will contribute as much as they are able. It is important to her that many people put in a little effort, rather than having a few people do most of the work.

While president, Mrs. Lizas has several interests she would like to promote. First, she would like to continue the auxiliary's work in raising awareness about breast cancer; the more people the auxiliary can reach, the more lives can be saved. Second, Mrs. Lizas wants to continue the programs aimed at preventing family violence, especially violence against women. Third, she plans to actively address the upcoming legislation concerning health care and doctors. The auxiliary must lobby for legislation that not only protects doctors, but provides the best possible health care for all. Finally, she would like to continue the many programs the auxiliary now sponsors. ■

In Memoriam

Anthony Lewandowski, M.D.

ANTHONY LEWANDOWSKI, M.D., a retired physician and Baltimore native, died of pancreatic cancer on February 21 at the age of 63. After graduating from Loyola College and the University of Maryland Medical School in the 1950s, he attained the rank of captain in the Army Medical Corps in Europe. From 1962 until his 1990 retirement, he was in private practice specializing in internal medicine and kidney disease. In the 1970s, he was assistant professor of medicine at the University of Maryland Medical School. He was a staff member of Maryland General, South Baltimore General, St. Joseph, Union Memorial, and University hospitals, and the Greater Baltimore Medical Center. Dr. Lewandowski was also a member of the American College of Physicians and the American Society of Nephrology.

Stephen Mackowiak, M.D.

STEPHEN MACKOWIAK, M.D., a general practitioner, died of Parkinson's disease complications on February 20 at the age of 81. A Baltimore native, Dr. Mackowiak graduated from City College, the University of Maryland Pharmacy School, and the University of Maryland Medical School in the 1930s. During medical school, he worked as a pharmacist. He served his internship and residency at the Emergency Hospital in Washington, DC. He served in the Army Medical Corps during World War II in the Pacific, where he attained the rank of captain and received a Purple Heart. In 1984, Dr. Mackowiak retired from his Dundalk practice after almost 40 years. He was a staff member of South Baltimore General Hospital and former president of the Maryland Academy of Family Physicians.

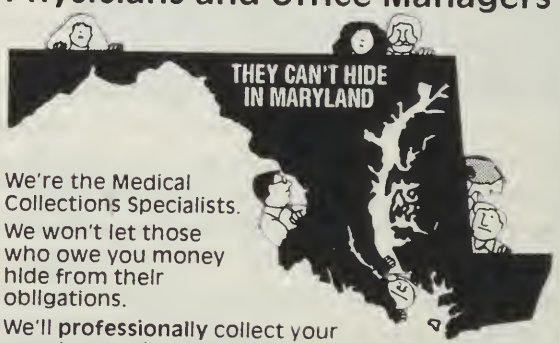
Albert I. Mendeloff, M.D.

ALBERT I. MENDELOFF, M.D., physician-in-chief at Sinai Hospital from 1955 to 1980, died of leukemia on March 15 at the age of 75. Originally from West Virginia, Dr. Mendeloff graduated from Princeton and Harvard universities. He acted as nutrition consultant to the surgeon general of the army during World War II. In St. Louis, he was an associate professor of medicine and preventive medicine at Washington University and a gastroenterologist at Barnes Hospital. In 1955, Dr. Mendeloff came to Baltimore and became Sinai's first full-time physician-in-chief and full professor of medicine at Johns Hopkins University. Dr. Mendeloff created the biochemistry research laboratory at Sinai in 1958. At Hopkins, he started the division of gastroenterology, serving as its co-director from 1957 to 1970. After his retirement as physician-in-chief in 1980, he headed the Sinai Department of Research Medicine. He also remained a professor at the medical school and senior associate in epidemiology at the Johns Hopkins School of Hygiene and Public Health. He also served as a consultant to the Loch Raven Veterans Hospital and held several posts at the National Institutes of Health. In addition, he served as president of the American Association for Clinical Research and of the American Gastroenterological Association. He served the past 12 years as president of the Shriver Hall Concert Series at Johns Hopkins University.

Gilbert Rudman, M.D.

GILBERT RUDMAN, M.D., 80, died of Parkinson's disease complications on March 7. Born in Baltimore, Dr. Rudman graduated from City College, Johns Hopkins University, and the University of Maryland Medical School. He was a general practitioner in private practice in Baltimore from 1939 until he retired in 1981. He was a staff member of Bon Secours Hospital. He was also a member of the Baltimore City Medical Society. ■

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Medical Miscellany

MSMSA holds first annual meeting on nontraditional medicine

On Saturday, February 13, 1993, the Maryland State Medical Student Association (MSMSA) held its first annual meeting. Representatives from the University of Maryland, Uniformed Services University of the Health Sciences, and Johns Hopkins University medical schools attended. Registration activities were conducted by Student Component officers and Council members, who also acted as greeters to all the students who attended.

While registration activities were underway, Med Chi staff escorted student members and guests on a tour of the Med Chi building. Students were shown the various departments within Med Chi and were provided with a brief explanation of department functions.



Figure 1. MSMSA President Susan Boyd and Vice President G. Andrew Clarke listen intently as Brian Berman, M.D. answers students' questions about nontraditional medicine.

A detour up the marble staircase leading to the roof provided students with a tale of the Med Chi ghost, Marsha, who allegedly ambles through the building at night. (Marsha was the name of the Med Chi librarian who lived on the top floor of the Med Chi building, and who probably had one of the very first condominiums in Baltimore.)

With registration activities completed, the educational program began. The theme of this first annual meeting—nontraditional medicine—was chosen because the subject interested many student members.

The first presenter, Brian Berman, M.D., assistant professor of anesthesiology at the University of Maryland, spoke on the "Integration of Traditional and Nontraditional Medicine." Dr. Berman is a family physician who practices acupuncture and homeopathy at the University of Maryland Chronic Pain Center. He is a graduate of the Royal College of Surgeons in Ireland and completed his residency at the University of Maryland. Currently, Dr. Berman is performing research into physicians' attitudes toward nontraditional medicine as part of a large collaborative project between the University of Maryland and the Sir Maurice Laing Foundation of Great Britain. The program mission is to "introduce complementary medicine into academic research, clinical service, and teaching." (Complementary medicine is the term used in Great Britain for treatment options termed nontraditional in the United States, including homeopathy, acupuncture, behavioral medicine, biofeedback, and relaxation techniques.)

In his talk, Dr. Berman explained that while allopathic medicine provides effective treatments for acute pain and acute disease states, many chronic conditions may be more effectively treated with components of complementary medicine. Using pain as an example, he stated that while traditional treatments for acute pain (e.g., high potency narcotics) are effective for short-term pain management, problems of tolerance and dependence limit their effectiveness for chronic pain. At the University of Maryland Chronic Pain Center, a combination of allopathic and complementary treatments are able to alleviate chronic pain in the vast majority of patients—most of whom enter the program having failed several other treatments.

Students questioned Dr. Berman about combining traditional and nontraditional medicine as part of the practitioner's everyday practice. Most students were curious about Dr. Berman's experiences with nontraditional therapies and expressed interest in having Dr. Berman make another presentation to the MSMSA.

After a short recess, which allowed the students to meet Dr. Berman personally, Jerry Toporovsky, Ms.T., director of the Baltimore Holistic Health Center, spoke on "The Bridge Between Alternative and Orthodox Medicine." Mr.



Figure 2. Jerry Toporovsky, Ms.T. presents "The Bridge between Alternative and Orthodox Medicine" at the MSMSA annual meeting.

Toporovsky shared his extensive experience studying alternative medicine worldwide and illustrated some of the theoretical differences between allopathic medicine and, for example, homeopathy. Although such views as reflected in homeopathy—that successive dilutions "potentize" a medicine—seem foreign in western medicine, Mr. Toporovsky emphasized that all of the many successful healers he has known—alternative and traditional—have shared a genuine concern and interest in their patients. This genuine concern for the patient's well-being, Mr. Toporovsky said, is what he believes is the essence of healing.

Mr. Toporovsky's presentation generated questions about holistic medicine and treatments. His extensive knowledge of nontraditional medicine and therapies peaked student interest and stimulated further discussion.

At the conclusion of the educational program, MSMSA officers reported on association activities. Susan Boyd, MSMSA president (University of Maryland), provided the students with an overview of Student Component activities during the last year. She also reported on upcoming initiatives and encouraged students to become active in the Student Component and on Med Chi committees. Robert L. Ferris, MSMSA secretary/treasurer and AMA alternate delegate (Johns Hopkins University), spoke about the AMA initiatives and his activities as AMA alternate delegate. G. Andrew Clarke, MSMSA vice president (Uniformed Services University of the Health Sciences), provided a legislative update for the students.

The brief business meeting was followed by dinner, which included a lively discussion on nontraditional medicine and provided the students with an opportunity to get to know one another. Social activities capped the evening when the entire group left Med Chi and went dancing at Fells Point until fatigue and the specter of upcoming exams sent everyone home.

The first annual meeting was hailed as a success. The three medical schools are anxiously looking forward to the activities for this year and to another interesting annual meeting.

SUSAN J. BOYD, MSII
President, MSMSA ■

Unique opportunity to join premier emergency group newly staffing St. Agnes Hospital, a teaching hospital with 52,000 ED visits; partnership opportunities available; excellent salary and comprehensive benefits. Contact Kevin Scruggs, M.D., Dept. EM, St. Agnes Hospital, 900 Caton Avenue, Baltimore, MD 21229-5299; (410) 368-2012.

WELCOME!

The Medical and Chirurgical Faculty of Maryland welcomes the new members listed below. They join an organization with a 194-year history of dedicated service to improving the health and welfare of the people of Maryland. With the help and expertise of longtime members and the participation and input of new members, Med Chi can continue its proud tradition of ensuring quality health care.

ALLEGANY COUNTY

Gallo, James J.
P.O. Box 1571
Cumberland, MD 21502
301-777-4965
AN; BC 005; SS 636,881

Giarritta, Nicholas
900 Seton Dr.
Cumberland, MD 21502
301-759-5107
PTH; BC 005

BALTIMORE CITY

Hinman, Edward J.
1501 Division St.
Baltimore, MD 21217
410-225-3731
GPM; BC 070; SS 656,312,318

Horn, Janet
5550 Newbury St.
Baltimore, MD 21209
410-466-4676
IM,ID; BC 020,205; SS 312,654

Howard, Daniel R.
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1st Fl.
Baltimore, MD 21201
410-328-5142
FP; SS 060

Kaplan, Michael S.
405 Frederick Rd.
Baltimore, MD 21228
410-247-1452
PMR; BC 060; SS 144

McCall, Noel E.
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Ste. 104
Baltimore, MD 21216
410-566-6446
IM

McIntyre, Louis F.
23 Crossroads Dr.
Ste. 340
Owings Mills, MD 21117
410-356-8200
ORS

Mellion, B. Theo
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Ste. 18
Lutherville, MD 21093
410-825-2600
NS; BC 840,336

Meyers, Carole M.
405 W. Redwood St.
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Baltimore, MD 21201
410-328-5749
OBG

Nasrallah, David V.
120 Sister Pierre Dr.
Ste. 301
Towson, MD 21204
410-321-8720
GS; BC 085; SS 336,916

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410-825-2600
NS

Schendel, Kevin G.
5601 Loch Raven Blvd.
3rd Fl., Russell Morgan Bldg.
Baltimore, MD 21239
410-323-6226
IM

Schimpff, Stephen C.
22 S. Greene St.
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410-328-7606
IM,ONC; BC 020,206; SS 590,312,868

Tarantino, Paul A.
23 Crossroads Dr.
Ste. 310
Owings Mills, MD 21117
410-581-1500
OPH; SS 115

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410-578-8702
CDS,IM; BC 020,201
SS 312,264

BALTIMORE COUNTY

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R; BC 080; SS 912

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Baltimore, MD 21239
410-435-4700
GS; BC 085

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Owings Mills, MD 21117
410-363-2240
PD; BC 055; SS 132

Goldstone, Andrew C.
6565 N. Charles St.
Ste. 610
Baltimore, MD 21204
410-821-5151
OTO,HNS; BC 045; SS 125

Jordan, Thomas E.
2112 Belair Rd.
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Fallston, MD 21047
410-879-7049
OTO; BC 045; SS 125,672

Lewin, Roger A.
Gibson Bldg., Ste. 139
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Towson, MD 21285
410-828-7045
P; BC 075,753; SS 516

Manning, Michael T.
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410-435-5924
IM,GE; BC 020,203; SS 312,384

Matz, Jonathan
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410-931-0404
AI; BC 020

McFarland, Edward G.
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410-383-0600
ORS; BC 040

Merryman, Ginny
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Timonium, MD 21093
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Miscellaneous meetings

Thrombolysis: Its role in peripheral, arterial, and venous disorders, at the Omni International Hotel, Norfolk, Virginia. Info: 804-446-6140. — **Apr. 23**

New trends in gastroenterology and liver disease II, sponsored by the Greater Baltimore Medical Center. 9.5 Cat 1 AMA/PRA credits. Info: 410-828-2688. — **Apr. 23-24**

Healing through loss I, sponsored by the Steven Daniel Jeffreys Foundation, Howard Community College, and Howard County General Hospital. 10 Cat 1 AMA/PRA credits. Fee: $150. Info: Dr. J. Shep Jeffreys, 410-992-4166. — **Apr. 23 and 30**

Professional practice in clinical chemistry: A review, sponsored by the George Washington University, at the Westpark Hotel, Arlington, Virginia. 29 Cat 1 AMA/PRA credits. Fee: $375 AACC members; $475 nonmembers. Info: Maria Gorrick, 202-994-4285. — **Apr. 25-29**

195th annual meeting of the Medical and Chirurgical Faculty of Maryland, at the University of Maryland, University College Conference Center, College Park, Maryland. Info: Betsy Newman, 410-539-0872 or 1-800-492-1056. — **Apr. 29-May 1**

Comprehensive oral radiographic diagnosis: The scanora integrated imaging system, sponsored by the Greater Baltimore Medical Center, at the Physician Pavilion Conference Center, Baltimore, Maryland. 4 Cat 1 AMA/PRA credits. Info: Bonnie Heneson, 410-356-8868. — **May 5**

Practical aspects of forensic medicine, sponsored by the Baltimore City Medical Society, at the Montebello Rehabilitation Hospital, Baltimore, Maryland. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. — **May 6**

9th national conference on prescription medicine: Information and education, sponsored by the National Council on Patient Information and Education, at the Washington Hilton and Towers, Washington, DC. Info: Rachael Carter, 202-347-6711. — **May 6-7**

Practical dermatology for the primary care physician, at the Ritz-Carlton Hotel, Pentagon City, Virginia. Info: 804-446-6140. — **May 6-9**

Virginia Society of Otolaryngology-HNS annual meeting, at the Tides Inn Resort, Irvington, Virginia. Info: Donna Scott, 804-353-2721. — **May 7-8**

Acoustic neuroma: Advances in diagnosis and management, at George Washington University, Washington, DC. 7 Cat 1 AMA/PRA credits. Fee: $100 physicians; $25 residents. Info: John F. Vargo, 202-994-4285. — **May 8**

Clinical auscultation of the heart, sponsored by the American College of Cardiology, at the Georgetown University Medical Center, Washington, DC. 18 Cat 1 AMA/PRA credits. Info: 800-257-4739. — **May 12-14**

Central Atlantic seminar in anesthesiology, sponsored by the George Washington University, at the Grand Hyatt, Washington, DC. 12 Cat 1 AMA/PRA credits. Fee: $150 members; $200 nonmembers. Info: John F. Vargo, 202-994-4285. — **May 13-16**

Maryland Academy of Family Physicians 45th annual meeting and scientific session, at the Princess Royale Oceanfront Hotel and Conference Center, Ocean City, Maryland. 41.25 Cat 1 AMA/PRA credits; 41.25 AAFP prescribed hours. Fee: $240 members; $275 nonmembers; $135 paramedicals; No charge for residents, medical students, MAFP retired and life members. Info: Francis C. Bruno, M.D., 410-747-1980. — **May 18-23**

6th annual trauma anesthesia and critical care symposium, sponsored by the International Trauma Anesthesia and Critical Care Society (ITACCS) and Multinational Academic Consortium, at the Hyatt Regency, Baltimore, Maryland. Info: Kimberly C.A. Unitas, 410-328-2399. — **May 20-22**

Virginia Society of Ophthalmology annual meeting, at the Norfolk Marriott Waterside, Norfolk, Virginia. Info: Donna Scott, 804-353-2721. **May 21-22**

Death and dying: The physician's trials and tribulations, sponsored by the Baltimore City Medical Society. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. **June 3**

Systemic lupus erythematosus update for primary care physicians, sponsored by the Maryland Lupus Foundation and the University of Maryland School of Medicine. 5 Cat 1 AMA/PRA credits; 5 AAFP prescribed hours. Fee: $75.00. Info: 410-337-9000. **June 5**

9th annual Eastern Virginia Medical School family medicine review course, at the Cavalier Hotel, Virginia Beach, Virginia. Info: 804-446-6140. **June 6-11**

Substance abuse education for primary care physicians: An overview of treating the substance abusing patient, sponsored by the Medical and Chirurgical Faculty of Maryland, at the Mercy Medical Center, Baltimore, Maryland. 1 Cat 1 AMA/PRA credit; 1 AAFP prescribed hour. Fee: none. Info: Carmine M. Valente, Ph.D., 410-539-0872 or 1-800-492-1056. **June 9**

Board review in family practice, sponsored by the George Washington University, at the Marriott Crystal Gateway Hotel, Arlington, Virginia. 41 Cat 1 AMA/PRA credits. Fee: $625 physician; $495 residents and fellows; $395 allied health professionals. Info: John F. Vargo, 202-994-4285. **June 12-16**

INMEDs fourth annual millennium conference, sponsored by the International Medical Services for Health (INMED) and the Tulane University School of Public Health and Tropical Medicine, Sheraton City Centre Hotel, Washington, DC. Info: 703-444-4477. **June 15-18**

11th summer symposium in internal medicine, at the Fort Magruder Inn & Conference Center, Williamsburg, Virginia. Info: 804-446-6140. **June 25-27**

16th annual flap dissection workshop, at the Virginia Beach Conference Center, Virginia Beach, Virginia. Info: 804-446-6140. **July 6-10**

Imaging the augmented breast, sponsored by the Baltimore City Medical Society. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. **Sept. 2**

The decade of the brain: An international conference, sponsored by the George Washington University, at the Omni-Shoreham, Washington, DC. 28 Cat 1 AMA/PRA credits. Info: John F. Vargo, 202-994-4285. **Sept. 11-14**

14th international congress of lymphology, sponsored by the International Society of Lymphology (ISL). Part 1: "Frontiers in Lymphology" at the Hyatt Regency, Baltimore, Maryland. Part 2: "Lymphology in 1993" at the Ramada Renaissance Techworld, Washington, DC. Info: Grace Wagner, Program Coordinator, 602-626-6118. **Sept. 20-26**

International liver symposium, sponsored by the George Washington University, at the Marriott Crystal Gateway Hotel, Arlington, Virginia. Info: Daniel E. Reichard, 202-994-4285. **Oct. 1-3**

Causes of the medical malpractice crisis, sponsored by the Baltimore City Medical Society. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. **Oct. 7**

Gastroenterology board review course, sponsored by the George Washington University, at the Marriott Crystal Gateway Hotel, Arlington, Virginia. 42 Cat 1 AMA/PRA credits. Fee: $625 physicians; $500 residents and fellows. Info: Daniel E. Reichard, 202-994-4285. **Oct. 9-13**

Medical oncology board review course, sponsored by the George Washington University, at the Ritz-Carlton, Pentagon City, Virginia. Info: John F. Vargo, 202-994-4285. **Oct. 9-13**

Continuously throughout the year

Fluorescein angiography conference, sponsored by the Retina Center, St. Joseph Hospital, Baltimore, Maryland, first and third Mondays of each month; 8:00-9:00 am. Fee: none. Info: R. Classon, 410-337-4500.

Shady Grove Adventist Hospital,

9901 Medical Center Drive, Rockville, Maryland. Info: 301-279-6115.

Teens, sex, contraception, and STDs	**Apr. 1**
Advances in reproductive technology	**Apr. 8**
Parasitosis	**Apr. 15**
Tumor board conference	**Apr. 22**
Long-term problems after repair of congenital heart disease	**May 6**
TMJ pain; fact or fiction	**May 13**
The vascular surgeon and the diabetic foot	**May 20**
Tumor board conference	**May 27**

The Johns Hopkins Medical Institutions

All courses at the Thomas B. Turner Building unless otherwise indicated. For information on continuing medical education activities, contact the Office of Continuing Education, 720 Rutland Ave., Baltimore, Maryland 21205 (410-955-2959).

Diagnosis and treatment of neoplastic disorders, medical surgical, and radiotherapeutic aspects. 14.5 Cat 1 AMA/PRA credits. **Apr. 1-2**

Current concepts in thyroid disease: Update 1993. Cat 1 AMA/PRA credits available. Fee: $150 physicians; $40 residents and fellows. **Apr. 16**

20th annual pediatric trends. 45 Cat 1 AMA/PRA credits. Fee: $625 physicians; $375 residents and fellows. **Apr. 19-24**

34th annual postgraduate institute for pathologists in clinical cytopathology. Course A: Home study, March-April 1993. Course B: Lecture series with laboratory studies. 140 Cat 1 AMA/PRA credits. **Apr. 19-30**

Clinical care of the patient with HIV infection, at the Stouffer Harborplace Hotel, Baltimore, Maryland. 13 Cat 1 AMA/PRA credits; 12.75 AAFP credits. Fee: $325 physicians; $165 residents, fellows, and allied health professionals. **Apr. 22-23**

Principles and practice of clinical MRI, at the Stouffer Harborplace Hotel, Baltimore, Maryland. Cat 1 AMA/PRA credits available. **Apr. 22-25**

XII international papillomavirus workshop, at the Hyatt Regency Hotel, Baltimore, Maryland. 30 Cat 1 AMA/PRA credits. Fee: $400 prior to June 30, 1993; $450 after June 30, 1993. Info: Gretchen Shelton, 410-931-8108. **Apr. 22-25**

Pediatric allergy and immunology for the practitioner. Cat 1 AMA/PRA credits available. **May 6-7**

New frontiers in atherosclerosis and lipoprotein metabolism. Cat 1 AMA/PRA credits available. Fee: $200. **May 13-14**

6th summer institute in environmental health studies. Info: Dr. Jacqueline Corn or Linda Lamb, 410-955-2609. **June 7-18**

Basic endoscopic sinus surgery. 19 Cat 1 AMA/PRA credits: lab and lectures; 14.5 Cat 1 AMA/PRA credits: lectures only. Fee: $1,250 laboratory and lectures; $295 lectures only. **June 17-18**

Tuberculosis in the 90s: Epidemiology, treatment, and control. Cat 1 AMA/PRA credits available. Fee: $165 physicians; $85 residents, fellows, and allied health professionals. **June 21**

Control of biohazards in the research laboratory, at the Hampton House Auditorium. Info: Dr. Jacqueline Corn or Linda Lamb, 410-955-2609. **June 21-25**

Coordination and monitoring of clinical trials. Cat 1 AMA/PRA credits available. **July 8-9**

Symposium on bone marrow transplantation–Current concepts and future directions. 7 Cat 1 AMA/PRA credits. Fee: $40. **July 16**

22nd annual diagnostic ultrasound in gynecology and obstetrics and abdomen, at the Stouffer Harborplace Hotel, Baltimore, Maryland. 16.5 Cat 1 AMA/PRA credits. Fee: Physicians: 3 days, $400; 2 days, $300; 1 day, $150. **Sept. 17-19**

Continuously throughout the year

Visiting preceptorship in pediatric critical care medicine. Ongoing five-day preceptorship by appointment. 40 Cat 1 AMA/PRA credits. Fee: $600.

The department of radiology and radiological sciences offers several courses in abdominal and obstetrical ultrasound. Info: P. Williams, 410-955-3169.

Visiting physicians. Offered throughout the year for experience in the lab and participation in read-in sessions; by appointment only. 40 Cat 1 AMA/PRA credits. Fee: $500.

Johns Hopkins medical grand rounds. Accredited audiovisual continuing education series of case discussions for clinicians; 30 topics per year in five bimonthly programs. Individual and group subscriptions. 40 Cat 1 AMA/PRA credits. Info: 410-955-3988.

University of Maryland

For each course, additional information may be obtained by contacting the Program of Continuing Education, University of Maryland School of Medicine, Room 14-011, BRB, 655 W. Baltimore St., Baltimore, Maryland 21201 (410-328-3956) or by calling the phone number listed after a specific program. FAX 410-328-3103.

Infectious diseases in everyday medicine–3rd annual symposium, at the Baltimore Convention Center, Baltimore, Maryland. 12.75 Cat 1 AMA/PRA credits. Info: Eunice Katz, 410-706-7560. **Apr. 19-20**

Continuously throughout the year

Visiting professor program. A directory of speakers and their topics is available to area hospitals and other health care organizations. NO administrative fees are charged for this service. Info: 410-328-3956.

Visiting fellowship in interventional radiology. Five-day practicum for radiologists, including conferences, patient rounds, and laboratory observations. By appointment only. 40 Cat 1 AMA/PRA credits. Fee: $1,200.

Ultrasound: Preceptorships. For physicians or sonographers with six-months of experience in practicing ultrasound. By appointment only. 40 Cat 1 AMA/PRA credits. Fee: $500.

Departmental rounds and conferences. Weekly, hands-on, and lecture presentations hosted by the university's clinical departments. Hour-for-hour Cat 1 AMA/PRA credits available. Brochure available.

Pediatric grand rounds. Every Thursday from September to June, except third Thursday, in the R. Adams Cowley Shock Trauma Auditorium. Info: Bonnie Winters, 410-328-6777.

PHYSICIAN'S RECOGNITION AWARD

During December 1992, the physicians listed below received the American Medical Association (AMA) Physician's Recognition Award. Established in 1968, the award's purpose is to encourage physician participation in continuing medical education and to recognize those physicians who have voluntarily completed programs of continuing medical education.

Mehdi N. Adham
Hosein Ali Arfaa
William Bruce Barham
Merrill Ian Berman
Cheryl Brown-Christopher
Crawford Southwell Brown
Bruce N. Butler
Irvin H. Cohen
Albert Joseph Ettore
Kenneth Ray Gaarder
Mitchel Allen Kanter
Lawrence Marion King
James L. Laubach
Lewis Mantel
Richard Alden Moriarty
K.C. Nimit
Marcia Ormsby
Franklin D. Richards
Leonard William Scheibel
Reza Shayesteh
Michael Kenneth Spodak
Aurelio Earl Vivino
Jean J. Vivino
James Wells Voell
James Douglas Winthrop

William Donald Schaefer - Governor of Maryland

DHMH Maryland Department of Health & Mental Hygiene

Nelson J. Sabatini - Secretary
Department of Health & Mental Hygiene

J. Mehsen Joseph, PhD - Director
Community Health Surveillance & Laboratories Admin

Ebenezer Israel, MD, MPH- Director
Epidemiology & Disease Control Program

EPIDEMIOLOGY & DISEASE CONTROL PROGRAM
201 W. Preston Street, Baltimore, Maryland 21201 (410)225-6700

April, 1993

Treatment of Lyme Disease

The following article is from the Medical Letter, Volume 34 (Issue 881), October 16, 1992. It is reprinted by permission of the publisher of The Medical Letter.

Lyme disease, a multisystem infection transmitted by ixodid ticks and caused by the spirochete *Borrelia burgdorferi*, is the most common vector-borne illness in the USA. It occurs mainly in the Northeast, upper Midwest, and California, but cases have been reported in 48 states, and also in Canada and many countries in Europe.

STAGES OF DISEASE - Early localized Lyme disease is characterized by erythema migrans, a pathognomonic skin lesion; some patients may not be aware of the lesion, which can occur in a hard-to-see area such as the buttocks or scalp. Fever, malaise, arthralgias, myalgias, and multiple skin lesions can also occur, possibly as a result of hematogenous dissemination. A minority of patients develop cardiac involvement (usually atrioventricular block), arthritis, or neurologic disease (Bell's palsy or other cranial or peripheral neuropathy, lymphocytic meningitis, or more rarely, encephalitis). Late manifestations include persistent arthritis, typically of the knee, and a variety of neurologic conditions, including encephalopathy and polyneuropathies.

DIAGNOSIS - Serologic testing can help confirm the diagnosis, but specific anti-*Borrelia burgdorferi* antibodies are usually not detectable until four to six weeks after initial infection. Enzyme-linked immunosorbent assay (ELISA) is the usual method of testing; interpretation of results may be complicated by false positives, poor standardization, and asymptomatic seropositivity (LL Bakken et al, JAMA, 268:891, 1992). A Western Blot may help identify false-positive ELISA results. Skin biopsies are positive for *B. burgdorferi* in up to 86% of untreated patients with erythema migrans; aspirate cultures may also be useful (BW Berger et al, J Clin Microbiol, 30:359, Sept 9, 1992; G Wormser et al, JAMA, 268:1311, 1992).

PROPHYLAXIS - The risk of acquiring Lyme disease can be decreased by avoiding heavily tick-infested areas, wearing proper clothing, using insect repellents, and promptly removing ticks. Data from animal studies suggest that transmission of infection is unlikely unless tick attachment persists more than 48 hours (J Piesman et al, J Infect Dis, 163:895, 1991). One controlled trial of antimicrobial treatment after deer tick bites in an endemic area found that only two of 173 patients treated with placebo developed erythema migrans, and none of 193 treated with amoxicillin. One of the two patients with erythema migrans and none of the asymptomatic patients seroconverted (ED Shapiro et al, N Engl J Med, in press). A cost-effectiveness analysis supported empirical treatment of tick bites (D Magid et al, N Engl J Med, 327:534, Aug 20, 1992), but Medical Letter consultants found the study unconvincing.

ERYTHEMA MIGRANS - Oral antibiotic therapy shortens the duration of the rash and, in most patients, prevents development of late sequelae. Doxycycline (100 mg b.i.d.) or tetracycline (250 to 500 mg q.i.d.) has been effective but should not be used in pregnant women or children less than eight years old. Amoxicillin (250-500 mg t.i.d. for adults; 25 to 50 mg/kg/day for children) is also effective and is preferred for children and pregnant or lactating women. One trial in 123 patients with early Lyme disease found cefuroxime axetil (Ceftin), 500 mg b.i.d., as effective as doxycycline (RB Nadelman et al, Ann Intern Med, 117:273, Aug 15, 1992). Treatment failures or relapses have been reported with all regimens.

NEUROLOGIC DISEASE - For patients with Bell's palsy alone, oral doxycycline or amoxicillin is generally used. Patients with other neurologic involvement, including meningitis, other cranial or peripheral

neuropathies, or encephalitis, have been treated effectively with intravenous (IV) penicillin G (20 to 24 million units per day), ceftriaxone (2 grams per day), or cefotaxime (2 grams q8h) (HW Pfister et al, J Infect Dis, 163:311, 1991). The same drugs may be effective for late neurologic complications, including cognitive deficits and polyneuropathies (EL Logigian et al, N Engl J Med, 323:1438, 1990).

CARDIAC DISEASE - Cardiac conduction abnormalities associated with Lyme disease are generally self-limited, but a temporary pacemaker may be necessary (HF McAlister et al, Ann Intern Med, 110:339, 1989). Patients with minor cardiac involvement (first degree atrioventricular block but PR interval less than 0.30 seconds) can usually be treated with doxycycline or amoxicillin. Those with more severe cardiac involvement (including first degree atrioventricular block with PR interval greater than 0.30 seconds) should receive IV ceftriaxone 2 grams per day or penicillin G 20 to 24 million units per day.

ARTHRITIS - Oral therapy with doxycycline or amoxicillin for one month has been effective for Lyme arthritis in many patients (NY Liu et al, Arthritis Rheum, 32:S46, 1989). Patients who have not responded to oral treatment may respond to intravenous therapy; penicillin G (20 to 24 million units per day) or ceftriaxone (2 grams per day) is often successful. For patients who develop refractory arthritis of the knee, arthroscopic synovectomy may be helpful (RT Schoen et al, Arthritis Rheum, 34:1056, 1991). In one study, patients with HLA-haplotype DR4 or DR2 were more likely to have prolonged arthritis, and those with HLA-DR4 had a poor response to antibiotic therapy (AC Steere et al, N Engl J Med, 323:219, 1990).

CONCLUSION - Lyme disease at any stage usually responds to antibiotic therapy, but few controlled trials comparing different regimens have been published. Since the incidence of infection after a tick bite is low, and treatment of early disease is effective and generally prevents late sequelae, prophylactic treatment of tick bites is not recommended.

TREATMENT OF LYME DISEASE[1]

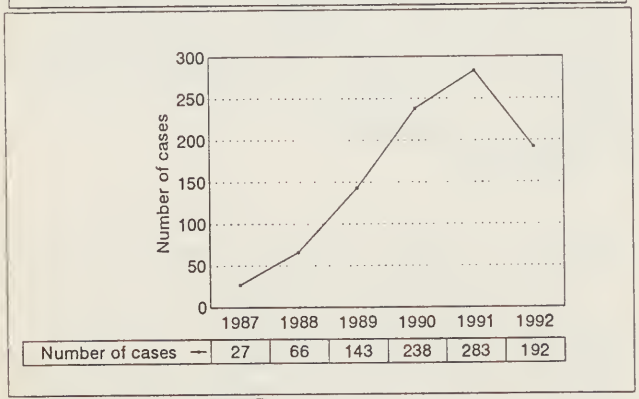
		Drug	Adult Dosage	Pediatric Dosage[2]
ERYTHEMA MIGRANS		Doxycycline[3] (*Vibramycin*, and others)	100 mg PO b.i.d.	
	OR	Amoxicillin (*Amoxil*, and others)	250-500 mg PO t.i.d.	25-50 mg/kg/day divided t.i.d.
Alternative:		Cefuroxime axetil *(Ceftin)*	500 mg b.i.d.	250 mg b.i.d.
NEUROLOGIC DISEASE				
Bell's palsy		Doxycycline[3]	100 mg PO b.i.d.	
	OR	Amoxicillin	250-500 mg PO t.i.d.	25-50 mg/kg/day divided t.i.d.
More serious CNS disease[4]		Ceftriaxone *(Rocephin)*	2 grams/day IV	75-100 mg/kg/day IV
	OR	Penicillin G	20-24 million units/day IV	300,000 units/kg/day IV
CARDIAC DISEASE				
Mild		Doxycycline[3]	100 mg PO b.i.d.	
	OR	Amoxicillin	250-500 mg PO t.i.d.	25-50 mg/kg/day divided t.i.d.
More serious[5]		Ceftriaxone	2 grams/day IV	75-100 mg/kg/day IV
	OR	Penicillin G	20-24 million units/day IV	300,000 units/kg/day IV
ARTHRITIS[4]				
Oral		Doxycycline[3]	100 mg PO b.i.d.	
	OR	Amoxicillin	500 mg PO t.i.d.	50 mg/kg/day divided t.i.d.
Parenteral		Ceftriaxone	2 grams/day IV	75-100 mg/kg/day IV
	OR	Penicillin G	20-24 million units/day IV	300,000 units/kg/day IV

1. Recommendations are based on limited data and should be considered tentative. The duration of treatment is not well established for any indication; it is usually based on severity of disease and rapidity of response. Clinicians generally recommend 10 to 30 days for oral drugs and 14 to 21 days for intravenous treatment.
2. Should not exceed adult dosage
3. Or tetracycline HCl (*Achromycin*, and others), 250-500 mg q.i.d. Neither doxycycline nor any other tetracycline should be used for children less than eight years old or for pregnant or lactating women.
4. In late disease, the response to treatment may be delayed for several weeks or months.
5. A temporary pacemaker may be necessary.

Lyme Disease in Maryland in 1992

The trend of Lyme disease in Maryland from 1987 to 1992 is shown in Figure 1. In 1992 every jurisdiction, except Allegany, Frederick and Garrett, reported cases. The number of cases and incidence rates per 100,000 population by jurisdiction in 1989, 1990, 1991, and 1992 are shown in Table 1.

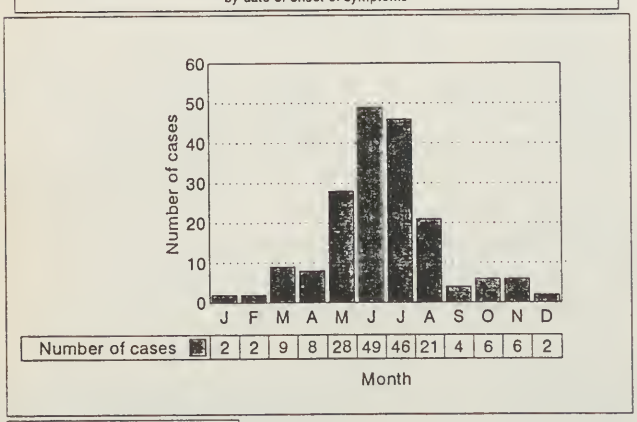
Figure 1. Lyme Disease Confirmed Cases*
1987-1992



* Cases meeting CDC definition

Eighty-one percent of the 192 cases had onset of illness in April through September; the peak incidence was in June (49 cases) and July (46 cases). See Figure 2.

Figure 2. 1992 Lyme Disease Confirmed Cases*
by date of onset of symptoms



* Cases meeting CDC definition

The male to female ratio was 1.5:1.0. Among the cases with known race (182), 164 (90.1%) were white, 13 (7.1%) black, and 5 (2.8%) other race. Ages ranged from 1 to 81 years (mean, median 32 years).

Of the 192 cases, 133 (69.3%) had erythema migrans, 54 (28.1%) had arthritis, 16 (8.3%) had Bell's palsy, 12 (6.3%) had erythema migrans and arthritis, 6 (3.1%) had radiculoneuropathy, 4 (2.1%) had cardiologic symptoms, and 3 (1.6%) had encephalitis. Thirty-two (16.7%) cases required hospitalization.

A definite tick bite prior to onset of illness was reported by 66 (34.4%) cases; 88 (45.8%) had no tick exposure and for 38 (19.8%), there was no available exposure information.

Table 1. Lyme Disease in Maryland
1989-1992

YEAR / COUNTY	1989 N	1989 Rate	1990 N	1990 Rate	1991 N	1991 Rate	1992 N	1992 Rate
Allegany	0	0.0	1	1.3	1	1.3	0	0.0
Anne Arundel	15	3.5	27	6.3	22	5.1	11	2.5
Baltimore City	6	0.8	12	1.6	10	1.4	11	1.5
Baltimore Co.	21	3.1	39	5.6	49	7.0	33	4.7
Calvert	9	18.4	7	3.6	4	7.5	6	10.9
Caroline	2	8.1	3	11.1	22	80.2	17	61.4
Carroll	1	0.8	5	4.1	4	3.1	2	1.5
Cecil	7	10.0	15	21.0	30	37.6	12	14.8
Charles	14	14.0	23	22.7	10	9.7	11	10.3
Dorchester	3	10.0	1	3.3	5	16.3	4	13.0
Frederick	3	2.1	3	2.0	2	1.3	0	0.0
Garrett	0	0.0	0	0.0	0	0.0	0	0.0
Harford	4	2.4	27	14.8	18	9.8	13	7.0
Howard	3	1.7	10	5.3	7	3.7	3	1.6
Kent	11	64.7	9	50.4	12	69.9	14	81.3
Montgomery	15	2.1	13	1.7	11	1.5	7	0.9
Pr. George's	8	1.1	10	1.4	8	1.1	8	1.1
Queen Anne's	11	33.0	10	29.5	27	79.6	17	48.7
Saint Mary's	3	4.2	5	6.6	14	18.7	6	7.9
Somerset	0	0.0	0	0.0	2	8.7	5	21.7
Talbot	2	6.9	1	3.3	4	13.7	5	16.9
Washington	1	0.9	3	2.5	0	0.0	1	0.8
Wicomico	2	2.7	6	8.1	6	7.9	2	2.6
Worcester	2	2.7	8	8.1	15	38.5	4	10.1
TOTAL	143	3.1	238	5.0	283	5.9	192	4.0

LYME DISEASE STUDY

The Maryland State Health Department and the University of Maryland School of Medicine have received federal funds to study patient outcomes after antibiotic therapy for Lyme disease. This study should provide useful data to assist the practicing physician in managing Lyme disease. Therefore, we urge you to report all suspected cases of Lyme disease to your local health department immediately.

Travelers Alert: Inactivated Japanese Encephalitis Virus Vaccine

Japenese encephalitis (JE) vaccine was available in the United States from 1983 through 1987 on an investigational basis, through travel clinics in collaboration with CDC (1). JE vaccine manufactured by Biken and distributed by Connaught Laboratories, Inc. (Japenese encephalitis virus vaccine, inactivated, JE-VAX), was licensed on December 10, 1992, to meet the needs of increasing numbers of U.S. residents traveling to Asia and to accommodate the needs of the U.S. military.

JAPANESE ENCEPHALITIS (JE) VACCINE IS NOT RECOMMENDED FOR ALL TRAVELERS TO ASIA. In general, vaccine should be offered to persons spending a month or longer in endemic areas during the transmission season, especially if travel will include rural areas. Under specific circumstances, vaccine should be considered for persons spending <30 days in endemic areas, e.g., travelers to areas experiencing epidemic transmission and persons whose activities, such as extensive outdoor activities in rural areas, place them at high risk for exposure. In all instances, travelers should be advised to take personal precautions; e.g., to reduce exposure to mosquito bites.

The decision to use JE vaccine should balance the risks for exposure to the virus and for developing illness, the availability and acceptability of repellents and other alternative protective measures, and the side effects of vaccination. Risk assessments should be interpreted cautiously since risk can vary within areas and from year to year and available data are incomplete. Estimates suggest that risk of JE in highly endemic areas during the transmission season can reach 1 per 5,000 per month of exposure; risk for most short-term travelers may be ≤ 1 per million. Although JE vaccine is reactogenic, rates of serious allergic reactions (generalized urticaria or angioedema) are low (1 to 104 per 10,000). Advanced age may be a risk factor for developing symptomatic illness after infection. JE acquired during pregnancy carries the potential for intrauterine infection and fetal death. These special factors should be considered when advising elderly persons and pregnant women who plan visits to areas where JE is endemic.

Primary Immunization Schedule

The recommended primary immunization series is three doses of 1.0 mL each, administered subcutaneously on days 0, 7, and 30. An abbreviated schedule of days 0, 7, and 14 can be used when the longer schedule is impractical or inconvenient because of time constraints. Two doses administered a week apart will confer short-term immunity among 80% of vaccinees. However, the schedule should be used only under unusual circumstances and is not routinely recommended. The last dose should be administered at least 10 days before the commencement of travel to ensure an adequate immune response and access to medical care in the event of delayed adverse reactions.

The immunization schedule for children 1-3 years of age is identical except that the manufacturer recommends 0.5 mL administered subcutaneously. No data are available on vaccine safety and efficacy in infants <1 year of age.

Protective levels of neutralizing antibody persist for at least 2 years in vaccinees who have completed a three-dose primary series. The full duration of protection is unknown, therefore, definitive recommendations cannot be given on the timing of booster doses. Booster doses of 1.0 mL (0.5 mL for children <3 years of age) may be administered after 2 years.

Reference: CDC, MMWR, January 8, 1993, Vol. 42/No. RR-1

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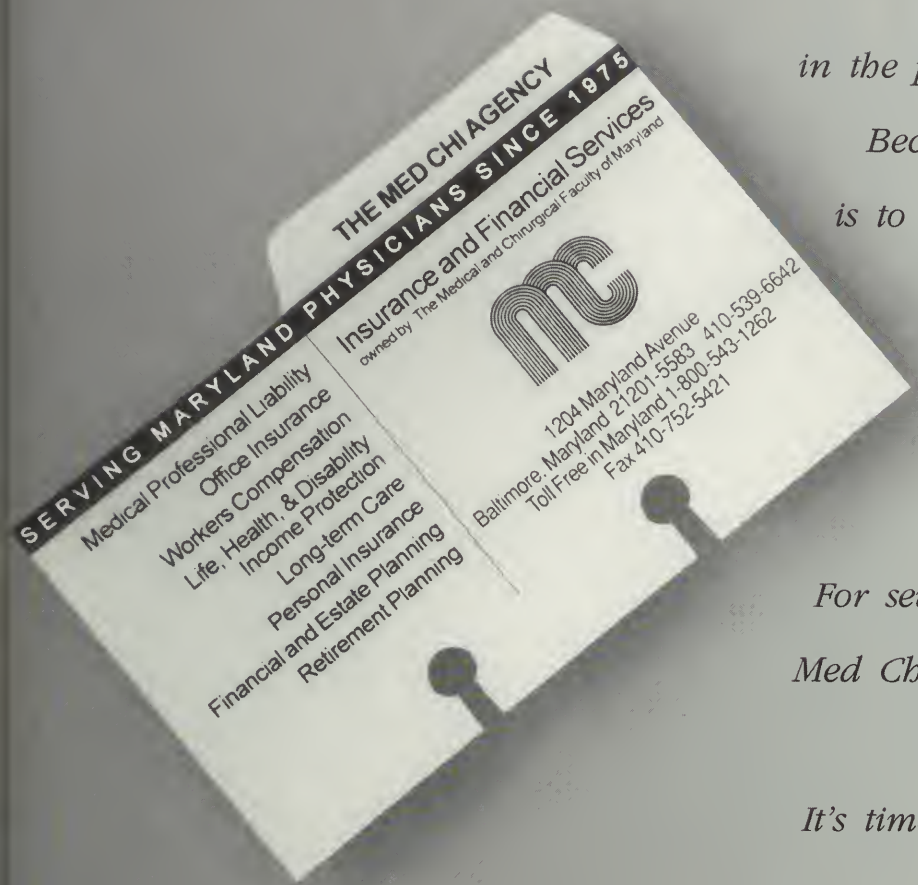
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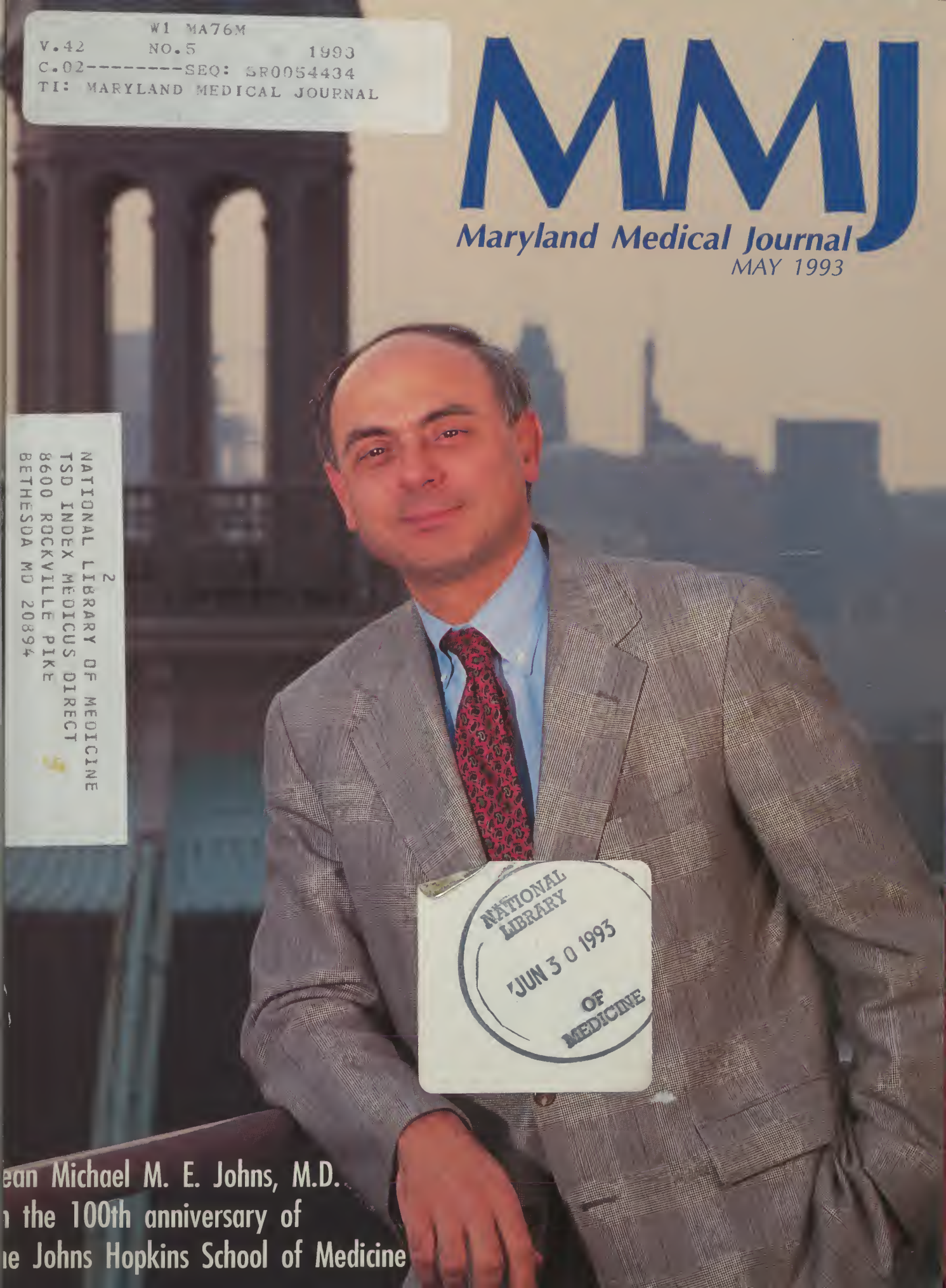
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- cognitive therapy;
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Executive Director's Newsletter

May 1993

New Med Chi Officers Elected

On May 1, 1993, the Med Chi House of Delegates elected the following officers who will serve through May 1, 1994:

Joseph Snyder, M.D. President
Donald H. Dembo, M.D. President-elect
Paul A. Stagg, M.D. Secretary
Carol W. Garvey, M.D. Treasurer
Alex Azar, M.D. First Vice President
J. Ramsay Farah, M.D. Second Vice President
Thomas E. Allen, M.D. Third Vice President
Allan D. Jensen, M.D. Council Chairperson
J. Richard Lilly, M.D. Council Vice Chairperson

The Med Chi House of Delegates also elected the following physicians to the Board of Physician Quality Assurance:

Frederick Alpern, M.D.
Ira N. Brecher, M.D.
Irvin Cohen, M.D.
Lawrence C. Jones, M.D.

Awards Presented During 1993 Annual Meeting

John O. Meyerhoff, M.D. was the recipient of the Wyeth Ayerst Laboratories Physician Award for Community Service. Dr. Meyerhoff received the award for his work with Parents Anonymous of Maryland.

The 1992-1993 Med Chi president, Jose M. Yosuico, M.D., presented certificates of recognition to the following physicians for their outstanding service and dedication as chairpersons of Med Chi committees:

Paul A. Stagg, M.D., Ad Hoc Committee on Self-Referral
Harrold T. Elberfeld, M.D., Maternal Welfare Subcommittee
Ronald Fishbein, M.D., Ad Hoc Bicentennial Committee
John G. Bartlett, M.D., Ad Hoc Review Committee on Physicians with Bloodborne Pathogens

Dr. Yosuico also announced the winners of the 13th Annual Med Chi Photo Contest:

Jerrold M. Post, M.D. - First Place
Mrs. Morrell L. Williams - Second Place

Jeffrey Jonathan Wise, M.D., a 1993 University of Maryland School of Medicine graduate and member of Med Chi, was presented with the Award for Excellence in Organized Medicine in recognition of his outstanding accomplishments.

Workers' Compensation Survey

On page 482 of this issue, there is an article by Neil A. Robinson, M.D., medical examiner for the Maryland Workers' Compensation Commission. Dr. Robinson provides answers to the most commonly asked questions about Workers' Compensation regulations. Following the article is a survey prepared by the Med Chi Committee on Managed Care and Third-Party Liaison in order to monitor and resolve problems associated with Workers' Compensation. Please take a few minutes of your time to complete the survey. Your responses can help Med Chi address your needs.

Free Training on Blood Collection for Lead Screening

The Department of Health and Mental Hygiene, Office of Child Health, offers free training on the fingerstick method of blood collection for lead screening. A new eight-minute training video has been developed. Call 410-225-6748.

New Medicare Policy

The most recent policy on Mohs Micrographic Surgery under Medicare follows this Executive Director's Newsletter.

1993 Med Chi Semiannual Meeting

The 1993 Med Chi Semiannual Meeting will be held Friday-Sunday, September 10-12, 1993, at the Sheraton Ocean City Resort and Conference Center.

Med Chi has reserved a block of rooms at a special group rate of $110.00 per night for a single/double occupancy room (tax and incidentals not included). To reserve a room, call the Sheraton at 1-800-638-2100 and tell them you will be attending the Med Chi meeting.

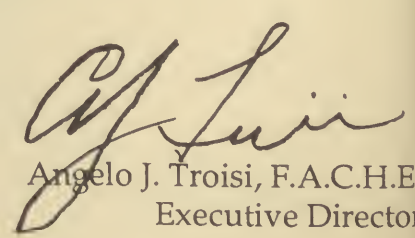
Registration form and tentative agenda are on pages 468 and 469 of this issue.

Substance Abuse Education

"Substance Abuse Education for the Primary Care Physician" is a Med Chi-sponsored program that can be delivered in a 1-3 hour format. This program, which can be held at the Med Chi Building or your place of work, is offered at no charge through August 1993. This program is made possible by a special grant and is limited to locations in Baltimore City. The next program is being held at the Baltimore City Health Department on Monday, June 28, 1993, from 1:00 p.m. - 4:00 p.m. For more information, contact Sandy Heim at 410-539-0872 or 1-800-492-1056.

Med Chi Bicentennial Celebration

Med Chi will celebrate its 200th birthday in 1999, and plans for this bicentennial celebration have begun. Anyone interested in providing input, please call Margaret Burri at 410-539-0872 or 1-800-492-1056.



Angelo J. Troisi, F.A.C.H.E.
Executive Director

Medical Policy

SUBJECT: Mohs Micrographic Surgery

EFFECTIVE DATE: 1990

REVISED DATE: Retroactive to 1/1/92

CPT/HCPCS Code(s): 17304, 17305, 17306, 17307, 17310

Description of Service: Mohs micrographic surgery is a microscopically controlled excision of skin cancer usually performed in stages (layers). Each layer-by-layer excision of cancerous tissue is removed and pathologic examination of each stage (layer) is performed by frozen section. All margins are microscopically examined until a tumor-free plane is achieved.

Coverage is available for each stage. Each stage includes removal of all gross tumor, surgical excision of tissue specimens, mapping, color coding of specimens and microscopic examination of specimens by the surgeon, up to 5 specimens. Additional coverage is available when more than 5 specimens, any stage, are indicated.

Mohs micrographic surgery requires a single physician to act in two integrated, but separate and distinct capacities: surgeon and pathologist. If either of these responsibilities are delegated to another physician who reports his services separately, these codes are not appropriate.

Clinical Indications: Indications for microscopic controlled excision of skin cancer include recurrent basal cell epitheliomas and squamous cell carcinomas; tumors with indistinct margins, such as sclerosing basal cell epitheliomas; and lesions in such areas as the inner and outer canthus of the eye and tip of the nose, where maximal preservation of normal skin is desirable.

Billing Instructions:

Only 1 initial stage code (CPT 17304) should be paid per surgical site. CPT 17305 and CPT 17306 are reported for the second and third stages respectively. Additional stage(s), up to 5 specimens, should be reported for each stage using CPT 17307. Additional coverage is available when more than 5 specimens, any stage, are indicated (CPT 17310).

Effective for services performed on or after January 1, 1992, each code for Mohs micrographic surgery is paid separately and is not subject to multiple surgery guidelines.

If more than one initial stage is reported because of multiple sites, payment should be made in accordance with multiple surgery guidelines (100%, 50%).

The medical necessity for more than 3 stages (layers) should be documented by report. These services will be reviewed for medical necessity.

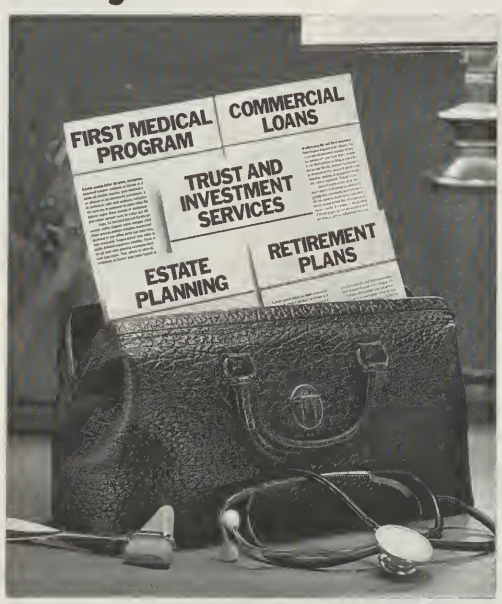
When Mohs micrographic surgery requires wound repair, Medicare will provide a benefit for a complex repair including complicated wound closure (CPT 13100-13152), skin grafting or adjacent tissue transfer or rearrangement. If a complex repair is performed, it will be processed in accordance with our multiple surgery guidelines. If the complex repair is the highest priced procedure, it will be allowed at 100% and the Mohs micrographic surgery will be allowed at 50%, including initial stage.

Approved by: Barry S. Gold, M.D.

Barry S. Gold, M.D., F.A.C.P
Medical Director

mohs.sug

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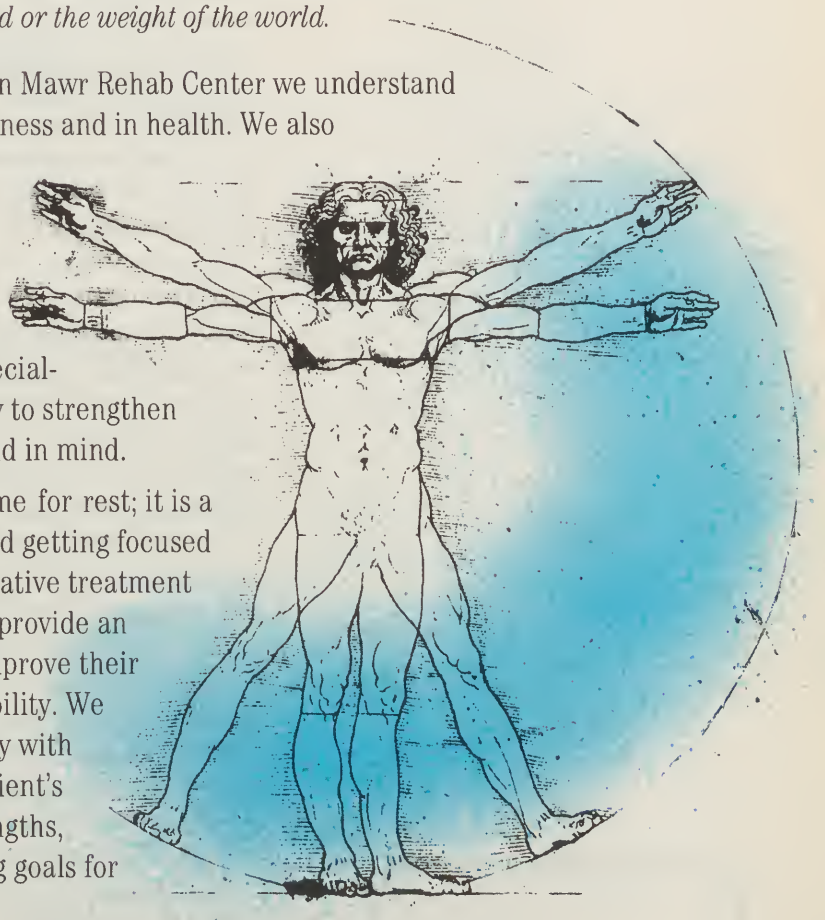
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LETTERS TO THE EDITOR

The first recorded case of alcohol abuse—Noah's arcoholism

"While Noah, goblet raised, extols the divine virtues of the grape, a child mutters, 'Grandpa's drunk again,' and God in Heaven pales."[1]

If one accepts the story of Genesis as fact, chronic alcoholism has been a curse to mankind since the days of Noah, about 3500 B.C. Even earlier, God provided Adam and Eve with barley, corn, malt, rye, grapes, and apples for the production of whiskey, beer, and wine. These natural substances, through fermentation, produce the aromatic volatile hydrocarbon—ethyl alcohol (C_2H_3OH), the world's oldest "mind drug." Beer, weak in alcohol content, was apparently unpopular in Biblical times, and whiskey did not become plentiful until distillation began in the fifteenth century. But the Bible mentions wine nearly 200 times.

Noah, a tenth-generation descendent of Adam, survived 40 days and 40 nights of rain aboard the ark with his family and paired zoological specimens. The ark touched terra firma, coming to rest on Mount Ararat seven months after the rain decreased, but almost a year passed before Noah and his family could step out of the ark onto dry land.

Skilled in husbandry, Noah promptly cultivated a vineyard. "He drank of the wine and was drunken, and he was uncovered within his tent."[2] Ham, Noah's youngest son, saw the nakedness of his father, and with derisive laughter he told his two older brothers. When Noah awoke sobered, he became aware of Ham's indiscretion and lack of filial respect, prompting his curse on Ham's descendants, "cursed be Canaan."[3]

"Noah was a righteous man, wholehearted (blameless) in his generations."[4] But was he blameless with his excessive drinking? Psychologists with forgiveness in their hearts absolve Noah from any wrongdoing since he was not knowledgeable of the secondary effects of alcohol or wine consumption.

Brelich, in *Navigator of the Flood*, surmises that Noah's benders were possibly the result of "survivor's guilt."[1] Perhaps Noah, having spent 120 years building the ark, and having endured a year of confinement with his family and a veritable zoo in the stormy vessel, became apprehensive, depressed, and insecure, and resorted to alcohol for its mind-altering effects. Could a "wet brain" with delirium tremens have been

Letters To The Editor

The editorial board of the *Maryland Medical Journal* welcomes comments, criticisms, recommendations, and observations from all its readers. Please submit letters to

Editor
Maryland Medical Journal
1211 Cathedral Street
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responsible for the hangover harshness of Ham's punishment? As a disillusioned, failed, post-ark paradigm, Noah could have developed a personality disorder, assuming that he was unable to cope with his commitment with God to obey the content of their covenant, the "Seven Commandments of Man."[5]

Since Noah's impropriety indirectly related to his three sons, Shem, Ham, and Japheth, who peopled the nations of the world, he could have saved mankind from many of its disparities if he had not planted the grapevine. Or as a hardened sailor, he could have been sufficiently ingenious to take one of the "three sheets in the wind" to cover his nakedness.

References

1. Brelich M. *Navigator of the Flood.* Marlboro, Vermont: Marlboro Press. 1991.
2. Hertz JH. *The Pentateuch.* Genesis 9:21 London: Soncino Press. 1950.
3. Hertz JH. *The Pentateuch.* Genesis 9:25 London: Soncino Press. 1950.
4. Hertz JH. *The Pentateuch.* Genesis 6:9 London: Soncino Press. 1950.
5. Hertz JH. *The Pentateuch.* Genesis 6:18; 9:8–17 London: Soncino Press. 1950.

ISADORE KAPLAN, M.D.
Taylor Manor Hospital, Ellicott City, Maryland. (Dr. Kaplan is a member of the Med Chi Committee on Alcoholism and Chemical Dependency.)

Patients' rights in a nursing home: An update

Your April 1993 edition carried an article which I authored, entitled "Patients' rights in a nursing home." Recent events in Maryland's General Assembly require that the information contained in that article be updated.

The state legislature has passed Senate Bill 664 and House Bill 1243. Should the governor sign either of these bills, Maryland will have a new statute clearly setting forth, for the first time, the rights of individuals, friends and family, and physicians in implementing advance medical decision making. The living will, durable power of attorney, and contemporaneous physician notation will remain avenues for the expression of patient desires. The bills create procedures to be followed in effectuating those desires.

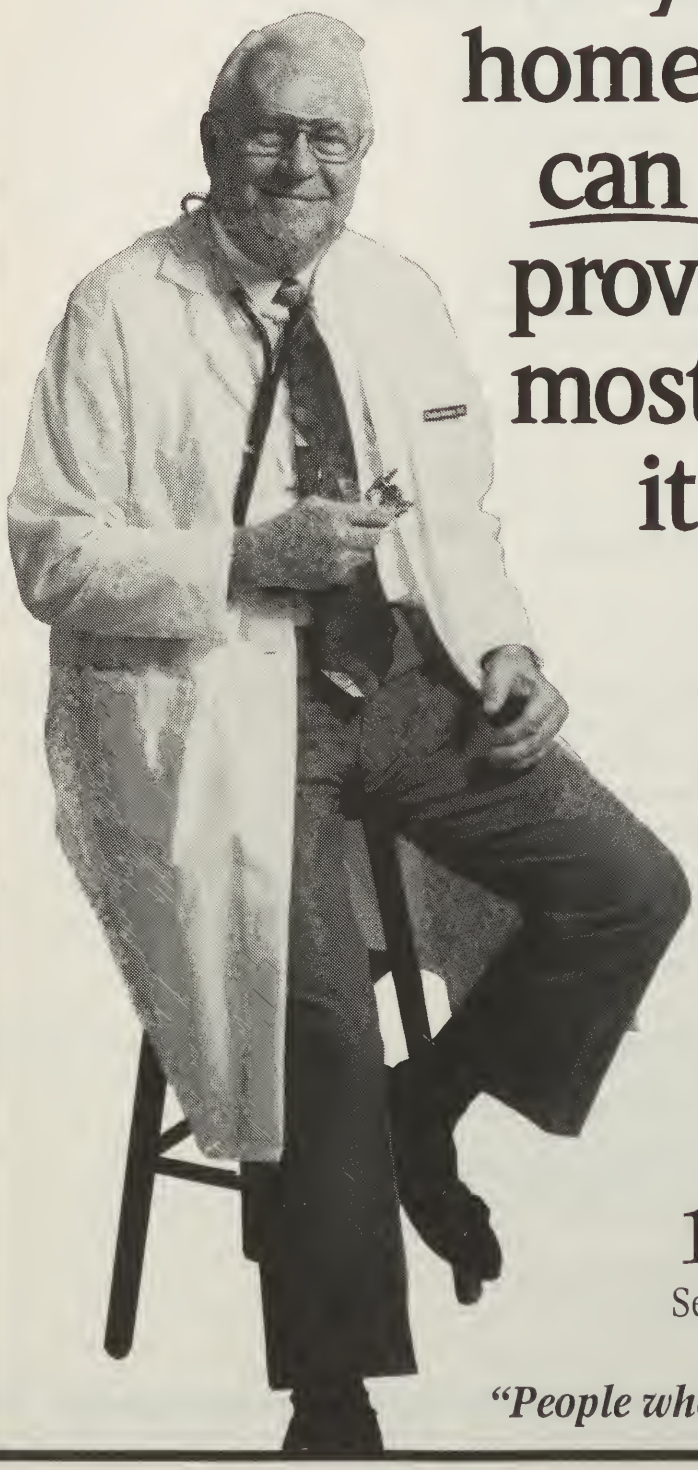
Two impending changes in the law are particularly worth pointing out. For the first time, friends of the patient will be entitled to participate in decision making on behalf of a patient who cannot give consent, if no family members are available. Second, under the circumstances set forth in the bills, substitute decision making by family and friends can be used to order the withdrawal or withholding of care.

Physicians will, of course, need to familiarize themselves with the details of the new legislation to assist their patients and patients' families in important medical decision making.

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Preparing Hopkins medicine for the 21st century: An interview with Dean Michael M.E. Johns, M.D.

Victor R. Hrehorovich, M.D. and Betsy Newman

Dr. Hrehorovich is editor of the Maryland Medical Journal. *Ms. Newman is director of communications, Med Chi, Baltimore, Maryland.*

"My basic philosophy of medical education is not to create a neurosurgeon, a family practitioner, a cardiologist, or a general pediatrician," says Michael M.E. Johns, M.D., dean of the Johns Hopkins University School of Medicine. "My goal is to create an undifferentiated physician who is fully capable of taking any path after graduating medical school."

This philosophy lies at the foundation of the innovative new curriculum for the school of medicine. "There's core knowledge every physician should know upon completion of medical school, no matter what he or she is going to pursue," explains Dr. Johns. The new curriculum is the first of many changes that have taken place since Dr. Johns took over as dean in July 1990. In his meeting with Dr. Victor R. Hrehorovich and Betsy Newman, Dr. Johns shared his views on medical education, research, and the future of clinical care.

On becoming dean

"It was evolutionary rather than revolutionary," says Dr. Johns about his ascension to leadership. It began just one month after arriving at Hopkins, when he tried to schedule a patient for an outpatient laryngoscopy. "I was told that Hopkins didn't have such an outpatient unit," he says. Rather than rescheduling the procedure, Dr. Johns arranged to have his patient arrive in the morning, change clothes in a closet, and go home shortly after surgery.

"After that, I went through the operating room schedule and checked off every case I thought could have been done as an outpatient. Then I went back and checked off those cases that didn't have to come in the day before the surgery, but could have come in on the morning of the surgery. No one seemed too interested in my list until I told them it would save the hospital millions of dollars." A few days later, Dr. Johns found himself as the chairperson of the ad hoc Same-Day Surgery Committee. This committee went on to create Hopkins' first ambulatory surgical center.

"I continued to work and become more active in committee work," says Johns, who was asked to serve as associate dean for clinical practice in 1986. While serving in this part-time position, he became involved in many larger

institutional problems. "When the opportunity to interview for the deanship came along, it wasn't a foreign idea to me."

When Dr. Johns became dean in 1990, he admits that he did not realize the complexity of his new position. "I thought of the dean as the steward of academic values," says Johns. "I thought all deans did was sit around, make a few decisions here and there, think academic thoughts, and channel orders outward to associate deans. I really knew it was more involved than that, but I didn't understand the breadth of the job. I don't think anyone can understand the full breadth of an institution until you sit in the dean's seat."

He recalls one of his first days as dean when he was reading notes from his electronic mail. "Someone in biophysics sent me a note about a synchotron," he says. "How was I supposed to know what a synchotron was?"

Dr. Johns acknowledges that he underwent a great deal of on-the-job training. "I didn't know how to ask people for money properly, how to work with alumni, or how to work with all the special interest groups," explains Dr. Johns. "There's not a school for learning these skills. Most leaders just evolve."

Curriculum

Revising the curriculum was one of Dr. Johns' first priorities as dean. "A major concern of mine about the traditional first years of medical school was that they are so didactic and driven," says Dr. Johns, who dislikes the fact that many medical students must sit in a classroom and absorb information from 8 a.m. to 5 p.m. "Having students just collect data and facts doesn't seem like a practical approach for the future." Two interesting features of the new Hopkins curriculum include an emphasis on infomatics and the elimination of formal afternoon classes.

The new format also includes Dr. Johns' concept of self-learning. "A physician doesn't graduate from medical school and stop reading or stop teaching or stop learning," he says. "You've got to continue to feed information into your head. Otherwise, you can't be effective. Curiosity is one of the most valuable traits of a physician."

Introduction to clinical medicine

Dr. Johns maintains that most people who enter medical school are driven by the idea of helping people, and yet most students do not ever see a patient until after they have completed two years of study. To address this problem, the new curriculum includes an introduction to clinical medicine, which links first-year medical students with one of 60 participating community physicians. For one afternoon every other week, first-year students observe physicians in their offices. The goal of the program is not to learn about medical procedures, but to learn how a physician relates to people. As part of this study of the physician/patient relationship, students are required to select a patient and study how that individual's medical problem affects activities of daily living. "The students have gotten to know their mentors and have developed nice relationships," says Johns. "I think it's important for Hopkins' whole generalist thrust. It's a great opportunity for students to see, early on in their career, what a generalist does. Students don't see only what someone on the cutting edge is doing. They really see both sides of it."



Figure 1. Dr. Johns, top right with (top to bottom) wife Trina, daughter Christina, and son Michael.

Physicians and society

In addition to addressing the physician/patient relationship, the new curriculum stresses the physician's role in the community. Students are required to take *Physicians and Society*, a course that combines medical ethics with the history of medicine and runs throughout all four years of medical school. The course also teaches the fundamentals of cultural anthropology, sociology, law, epidemiology, and medically oriented art and literature. "We really need to be certain that our students understand themselves and the world around them," says Dr. Johns. "They are part of the society in which they live. You can't be an ethical physician unless you understand in some depth the society in which you function."

Journal club

Another program created to emphasize the self-teaching process is a weekly journal club where students learn to analyze and read medical journals critically. "My son called me the first week after he went to journal club," Dr. Johns recalls. (Both his son, Michael, and his daughter, Christina, are enrolled in the medical school.) "He said they had discussed a paper from *Science* magazine on membrane receptors for growth hormone. I asked: 'Did you understand it?,' and he proceeded to tell me all about growth hormone. He had been an economics major, so I was really impressed."

Student reaction to the new curriculum has been positive. "I think some of the faculty may have the sense that it takes a little bit more work," admits Dr. Johns. "That's probably true because they need to sit back and rethink—'What is my lecture going to be like?' 'How am I going to address a small group?'"

Residency training

"There is clearly a strong perception that we should have more generalists," says Dr. Johns, who believes that sub-specialization training is out of control. In a 1992 address on the future of medical education, Dr. Johns stated that "a form of fellowship fetishism has developed that bears little or no relationship to the needs of either physicians or society."

Residency training, according to Dr. Johns, should be based on goals and objectives, and not on years of service. "I have this notion that in many residency programs, you serve your term of incarceration. You could serve three, four, five, or even ten years. There's nothing magic about the numbers." Dr. Johns believes a more efficient program would require residents to reach certain milestones. Once each goal is attained, the resident would move on to the next level of the program, regardless of the amount of time served.

Dr. Johns notes that physicians who complete their residency training are not considered master clinicians. "They haven't had enough experience," he says. "I think that's one of the problems with trying to create treatment paradigms." Paradigms, says Dr. Johns, make the wrong assumption that every patient is exactly the same. "When physicians encounter patients, they have to compare the patients with people with similar complaints and problems. Sometimes it doesn't quite jibe. That's why a senior clinician may look at a problem in a totally different way from a junior clinician."

Physician distribution and specialization

One way Dr. Johns believes many residents can gain valuable experience is through a national health service corps. Dr. Johns speculates that the corps could be used to address the need for physicians in underserved areas. "You can't force distribution of physicians," says Johns, who believes that



Figure 2. Dr. Johns, fourth from left, meets with some members of his senior staff. Left to right, Richard Grossi, associate dean for finance and administration; Paul Hoffstein, assistant dean for clinical practice; Dr. David Blake, senior associate dean; Dr. Catherine DeAngelis, associate dean for academic affairs, and Dr. John Stobo, acting associate dean for clinical practice.

without special areas in which corps physicians would be required to serve, most practitioners would avoid underserved areas in many urban and rural settings.

Dr. Johns also promotes a more rational system of distributing residents through a national commission on graduate medical education that would be charged with assessing national and regional health care needs. The number of slots available in each area would be based on each facility's specific needs and capabilities. He believes the system could be one way of controlling overspecialization while also ending service problems.

Overspecialization is another problem Dr. Johns hopes to address as dean. "We need more generalists," he says. "But I don't think we'll solve this problem in the near future." He cites a University of Wisconsin study that claims that if 50% of all graduating medical students were to pursue primary care specialties beginning in 1995, 50% of physicians would be generalists by the year 2040.

Research

"The research side is also very exciting," adds Dr. Johns. "The opportunities are unbelievable." Since Dr. Johns became dean, Hopkins jumped from number two to number one in the amount of National Institutes of Health (NIH) funding it receives for medical research. In 1992, Hopkins received $157 million in NIH grants.

Recent research advances at Hopkins include work by Bert Vogelstein, M.D., and a team of scientists at the Johns Hopkins Oncology Center. The Vogelstein team has mapped the genetic changes leading to the development of colon cancer. Their research reveals that one of these mutations produces an altered version of the p53 gene. These mutations could be used as a tool to detect presymptomatic colon cancer years before current "early detection techniques." In addition, Dr. Vogelstein's *in vitro* research has shown that replacing the mutated p53 gene with a normal gene stops the growth of colon cancer cells.

One of Dr. Vogelstein's former fellows, David Sidransky, M.D., recently showed that mutated p53 cells are shed in patients with early bladder cancer. Because these cells can be detected in the urine, there is the potential for a simple urine test to detect early bladder cancer.

Dr. Johns finds the clinical applications of this type of research fascinating. "Can you imagine preventing arthritis or preventing or making an early diagnosis of diabetes? I think these are real events that will occur. We will be able to correct the disease before the ravages of the disease take effect. That means we save money as well. I have confidence that we will find *in vitro* techniques that will work. What a dramatic effect that will have on health care."

The future of clinical care

Dr. Johns maintains that the future of medical care is here today. He cites a study by the American Hospital Association showing that in 1990, the number of outpatient surgeries surpassed the number of inpatient surgeries for the first time ever. With the increasing use of laparoscopes, Dr. Johns predicts the number of outpatient surgeries will continue to increase. "Much of what we now call primary and secondary inpatient care will be outpatient," says Dr. Johns. "I had a physician recently who did a vaginal hysterectomy on an outpatient. Technology will drive us that way."

Yet despite technological innovation, Dr. Johns retains some skepticism. "Can we get from the year 1993 to the year 2000 without being totally dismantled?," he asks. Critical of the health economists who are formulating health care policy, Dr. Johns says, "They're not creating health **care** policy. They're creating health **cost** policy." "We must develop a workable vision of a nationwide health system."

Dr. Johns cautions against efforts to cut costs. "We're spending too much time talking about costs and not enough time talking about patients," he says. He expresses his desire for the medical school to be more responsive and efficient as a patient care delivery system. Hopkins' service culture, believes Johns, should be of the same quality as its research. "I believe we have some of the world's best physicians here. The issue is: how do they work as a symphony rather than as a group of individual virtuosos. Society would like us to come together and work as a symphony. That symphony should include cost-effective, high-quality patient care."

Overall, Dr. Johns is optimistic about the future of medicine and the Johns Hopkins University School of Medicine. Through all the worries about cost control and system reform, he sees amazing possibilities in the years to come. "Academic medical centers are on the verge of tremendous medical breakthroughs that will transform medicine," he says. "Hopkins has a tradition of excellence. I can only hope to try and sustain that in the future, as the Hopkins medical school begins its second century." ■

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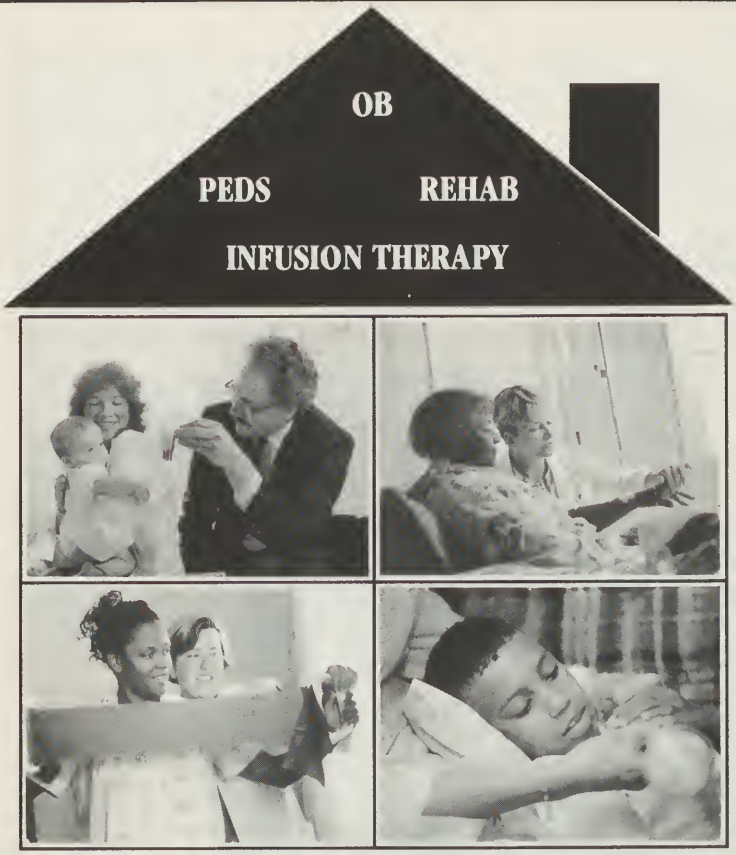
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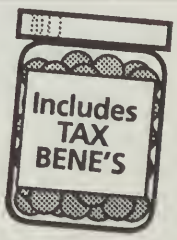


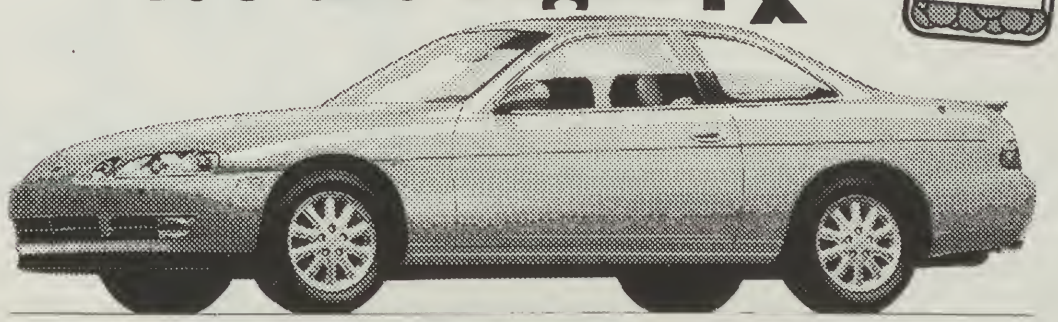
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Creating the medicine of tomorrow: Ten hot Hopkins research areas today

David A. Blake, Ph.D.

ABSTRACT: *From its very beginnings, the Johns Hopkins School of Medicine has fostered the development of physician scientists whose research and practice of medicine are closely intertwined. As a result, the long list of medical breakthroughs—of Hopkins "firsts"—has put the institution at the forefront of medical research in the past century. This tradition continues today, with research in many and diverse areas. Ten current projects underway at Hopkins, attempting to unravel mysteries in neurology, oncology, genetics, hematology, and nephrology, are described in this article. All hold promise to continue the reputation of Johns Hopkins as a leader in research, to become new milestones in the progress of modern medicine.*

Dr. Blake is senior associate dean at the Johns Hopkins University School of Medicine and is responsible for the school's research and technology transfer programs.

"Truth and utility are the very same thing," said Francis Bacon three centuries ago. From its inception, Hopkins has been a leader in putting this message into practice, by nurturing the physician scientist and giving equal weight to pure science and clinical medicine.

When the Johns Hopkins University School of Medicine opened in 1893, it was the first American school to insist on extensive premedical training. Small classes, laboratories in the basic sciences, teaching at the bedside in the clinical years, and the training of investigators who could relate the basic sciences to human disease were Hopkins hallmarks from the start. Hopkins became what no medical college had ever been: a center of basic as well as applied science.

So it was not by accident that Hopkins became an internationally renowned center for biomedical discoveries. The first medical school to give doctors the luxury of being paid to do research, Hopkins' long list of firsts has helped revolutionize the practice of medicine over the course of the last century. That tradition continues.

Today, Hopkins scientists continue to make tremendously exciting discoveries in fields that range from clinical genetics to neuroscience, from biophysics to oncology, from molecular pharmacology to

hematology—discoveries that may again completely change the approach to disease.

Discoveries in molecular genetics, for example, may soon be transferred from the bench to the bedside. Eventually, physicians may be able to locate defective genes and remove, replace, or repair them before they can cause such problems as cancer or diabetes.

In another field, integration of the science of the brain, behavioral science, and the clinical neurosciences promises a profound understanding of ourselves and entirely new approaches to neurologic and behavioral disorders. Transplantation of cells and organs is opening new possibilities for treating a broad range of diseases. Prevention of illness, rather than treatment of end-stage disease, will gain increasing emphasis. In all these areas, Hopkins scientists and physicians will continue to be at the forefront of discovery and application of knowledge for the benefit of humankind.

Every decade, a very few studies emerge as milestones that move medicine forward. A century from now, when our great-grandchildren look back on today's research, which advances will be considered the seminal studies that revolutionized the practice of medicine? Which papers will be chosen as the greats of the next hundred years?

Ten of the most fertile research areas at Hopkins now are all likely candidates for that future list of greats.

Ephemeral messengers in the brain

Science magazine declared nitric oxide the "molecule of the year" in 1992, when research from neuroscientist Solomon Snyder's laboratory helped elevate the status of this gas from toxic molecule to crucial carrier of messages between brain cells **(Figure 1)**. The gas was previously known to be a relaxer of blood vessels, but the discovery of nitric oxide's function in the brain established gases as an entirely new class of neural messengers and created a whole new way of thinking about biological signaling. Snyder's studies on the basics of nitric oxide—how it works, where it's found and regulated, and how it can go awry—also may have clinical implications for stroke, Alzheimer's disease, and Huntington's disease.



Figure 1. In 1992, neuroscientist Solomon Snyder's laboratory helped elevate the status of nitric oxide from toxic molecule to crucial carrier of messages between brain cells. (Photo by William Coupon.)

Recently, a second gas—carbon monoxide—was found to carry signals between neurons as well. And other research—a collaboration between urologists and neuroscientists—solved an age-old mystery by demonstrating that nitric oxide, in transmitting signals from nerves to muscles in the penis, is responsible for penile erections. This discovery one day may yield new treatments for impotence, which affects one in 10 American men.

p53: A gene that suppresses cancer

Intense investigation at Hopkins focuses on two innovative approaches to combating cancer. Both involve manipulating the body's own natural defense systems so that they kill cancer cells and leave normal cells unharmed.

In Bert Vogelstein's laboratory, researchers have laid bare the molecular genetics of colorectal cancer, the second most common form of cancer in the United States. They have discovered that colon cancers result when a number of mutations arise in two different types of genes—oncogenes and suppressor genes such as p53.

In 1990, Vogelstein **(Figure 2)** found that replacing just one mutated p53 gene with a normal copy is enough to stop the growth of cancer cells—at least in a test tube. Though it may never be possible to insert a normal copy of this gene into people with colon cancer, understanding how suppressor genes such as p53 work may lead to the development of drugs that could turn off the cell growth switches.

Vogelstein's team also discovered an association between p53 and tumors of the breast, lung, brain, ovary, and bladder, making it the most common genetic alteration that occurs in human cancers. Recently, the researchers found that the normal job of the p53 suppressor gene is to help healthy cells respond to DNA (deoxyribonucleic acid) damage caused by environmental carcinogens. When p53 functions properly, it tells genetically damaged cells to stop making new DNA. But if the gene is missing or mutated, the injured cells continue to divide, and that contributes to the development of a cancer. Further research on how this mechanism works is essential, since as many as 80% of all cancers may be due to exposure to environmental carcinogens.

Scientists also found that another suppressor gene, called APC, is responsible for colon cancer when a mutated version of it is inherited. Members of at-risk families now can be screened for mutant APC genes prenatally or after birth. Another test developed by the lab detects mutations of the ras oncogene in



Figure 2. In 1990, Bert Vogelstein, M.D. found that replacing just one mutated p53 gene with a normal copy can stop the growth of cancer cells—at least in a test tube. (Photo by Peter Howard.)

stool samples. The ras oncogene is a growth-promoting gene that the team had previously linked to colon cancer.

Currently, more than 58,000 people die each year from colon cancer. The new tests may allow colon cancer to be detected in the early, premalignant stage, when it is almost always curable.

Fighting cancer with the body's own "smart bombs"

Taking a slightly different tack, cancer researcher Drew Pardoll has stopped tumor growth in mice by genetically stimulating the animals' own immune systems. In the fall of 1991, he was the first to show that gene therapy could cure an animal of an already established tumor—a renal cell cancer. Phase I trials to test this approach on human cancers are about to begin.

Pardoll's approach involves calling the body's natural cancer-fighting chemicals into action from within the tumor cells. He genetically engineered mouse tumor cells to secrete large doses of a natural chemical called Interleukin-4 (IL-4). The IL-4 stimulated an immune response that destroyed the mice's cancer.

Ordinarily, immune system cells called T-cells produce IL-4, but for a yet unknown reason, T-cells are not properly activated in cancer. Pardoll's genetic manipulation activated the T-cells. Once activated, these cells function like "smart bombs," killing the specific target but leaving little collateral damage.

Preventing cancer by protecting cells: The broccoli connection

The work of Vogelstein and Pardoll offers great hope for developing new ways to treat cancer, but many scientists believe the greatest hope of all lies in prevention, and it is therefore essential to make that a research priority. Molecular pharmacologist Paul Talalay, who heads a program to develop strategies for protection against cancer, points out that despite tremendous advances in our understanding of the process of carcinogenesis, survival rates have not changed much over the last two decades.

Talalay studies chemicals that increase the resistance of cells to external carcinogens. Last year, he identified and isolated a potent chemical found in broccoli and other vegetables that appears to protect human cells against cancer—a finding that attracted worldwide attention **(Figure 3)**.

He found that one variety of broccoli contained especially high levels of this cancer-fighting chemical, called sulforaphane. His lab now is testing sulforaphane's ability to block tumor formation in animals.

Human epidemiological studies have repeatedly shown that eating cruciferous vegetables such as broccoli and brussels sprouts

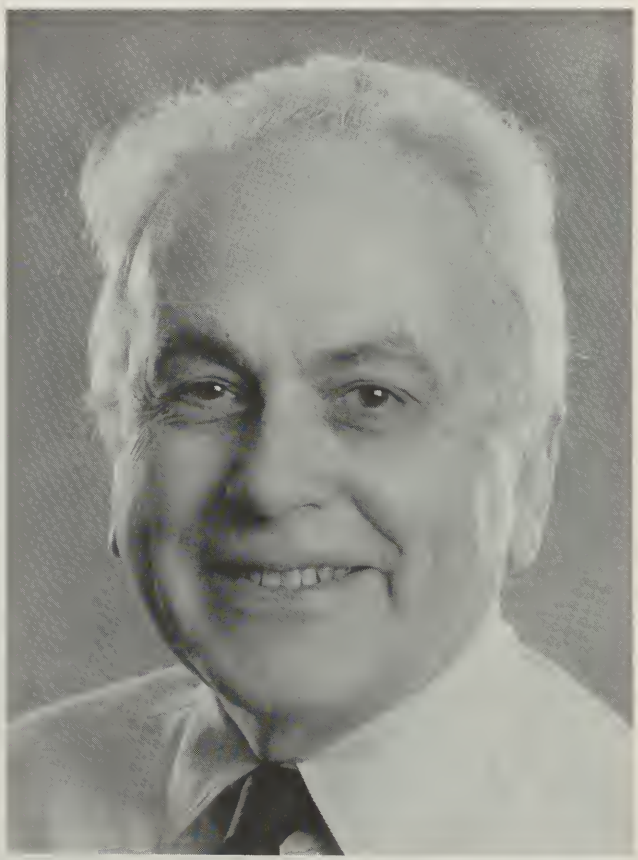


Figure 3. Last year, molecular pharmacologist Paul Talalay identified and isolated a potent chemical found in broccoli and other vegetables that appears to protect human cells against cancer. (Photo by Robert Smith.)

lowers the risks of developing some types of cancer. Talalay's work has forged a new link in our understanding of how this chemoprotective process works on a cellular level.

Zinc: A major player in development and disease

Biophysicist Jeremy Berg's research on the DNA-binding proteins known as zinc fingers yields new insights into how a single cell develops into a complex organism (**Figure 4**). Although results are still preliminary, zinc finger studies are providing a new avenue of research that could have clinical implications for the treatment of both cancer and acquired immunodeficiency syndrome (AIDS).

The hundreds of different zinc finger proteins in the human body make many of the decisions about which genes are activated and which are shut down in a given cell. The name "zinc finger" comes from the fact that zinc, the second most abundant metal in the body, is the glue that holds these proteins together. About 1% of all human genes are now thought to be zinc finger genes.

Each zinc finger is designed specifically to bind to one DNA sequence and not others. Berg's work someday may enable researchers to custom-design zinc fingers to bind to particular DNA sites, which could lead to new therapies for diseases that involve defective zinc fingers. To treat Wilm's tumor, a childhood kidney cancer, for example, Berg envisions replacing a mutated zinc finger gene that fails to stop cell division at the proper time with a normal one that stops excess cell growth.

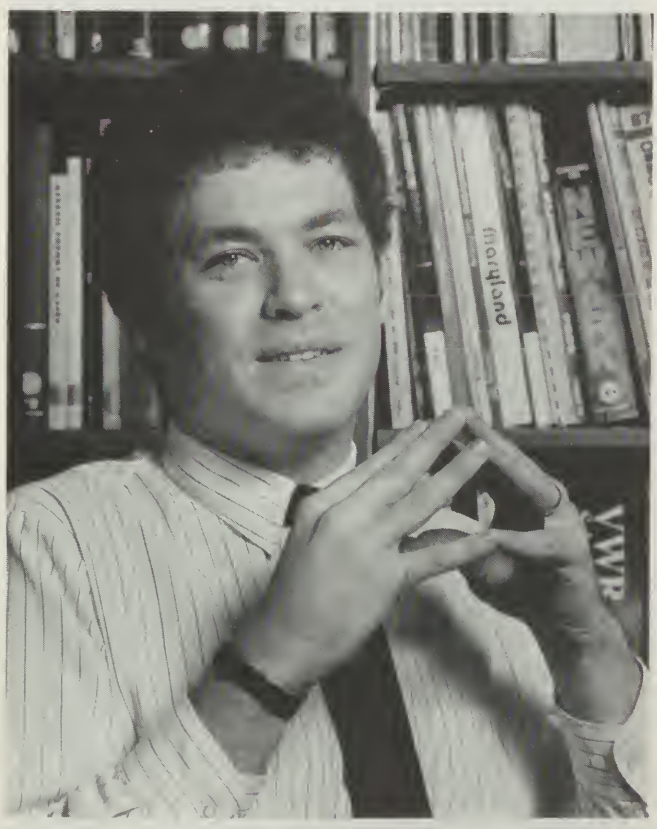


Figure 4. Biophysicist Jeremy Berg's research on zinc fingers has yielded insights into how a single cell develops into a complex organism. (Photo by E.M. Sweeney, Jr.)

Sickle cell successes

Although sickle cell was one of the first disease genes to be identified in the early 1980s, recent advances in treating the painful blood disorder have come not from geneticists but from fortuitous happenstance and multidisciplinary collaboration among Hopkins researchers.

In patients with sickle cell disease, the normally soft, round red blood cells become rigid and sickle-shaped. Painful crises occur when these sickled cells get jammed up in the blood vessels as thumbtacks would if they tried to flow through a rubber hose. Preventing these episodes drives the research in sickle cell disease therapy.

Pediatric hematologist George Dover, who is said to know more about fetal hemoglobin than any researcher in the country, discovered that some individuals retain the ability to produce fetal hemoglobin into adulthood (**Figure 5**). Normally, only fetuses and babies under six months old produce fetal hemoglobin. The gene that triggers its production shuts off at about that time, so that most adults have only minute amounts of this type of red blood cell. In people with sickle cell disease, this type of hemoglobin can reduce the number of sickled red blood cells circulating in the blood stream and lessen the frequency and severity of the painful vaso-occlusive crises that characterize the disease.

In 1990, Dover and his colleague Sam Charache published a ground-breaking study, in collaboration with researchers at the National Institutes of Health (NIH), showing that hydroxyurea, a chemotherapy agent, elevated fetal hemoglobin by as much as 10-fold. But the agent had too many side effects to be tested in children.

In 1992, NIH researcher Dvorit Samid informed Dover that a drug called phenylbutyrate also raised fetal hemoglobin levels. Developed by Hopkins pediatrician and metabolism specialist Saul Brusilow, phenylbutyrate had been used for 10 years without side effects in children with rare inborn errors of metabolism. Clinical trials using phenylbutyrate to treat children with sickle cell disease are in progress with promising results so far.

A diet that slows kidney disease

Kidney disease is still one of the nation's big killers. Nearly 200,000 Americans must undergo dialysis regularly or receive a kidney transplant, at an annual cost of $7 billion. Mortality rates on dialysis average 20% per year.

Over two decades ago, research nephrologist-pharmacologist Mackenzie Walser prescribed relatively simple dietary



Figure 5. Pediatric hematologist George Dover discovered that some individuals retain the ability to produce fetal hemoglobin into adulthood. (Photo by Vince Rodriguez.)

changes to forestall end-stage kidney disease. He and his colleague William E. Mitch were the first to show that a low-protein, largely vegetarian diet supplemented with ketoacid analogues of amino acids could temporarily slow the progression of kidney disease and, for some patients, postpone costly dialysis treatments.

The ketoacid-supplemented diet, developed in 1970 by Walser and his associates, was designed to decrease the amount of waste nitrogen produced in the body, which is mostly derived from dietary protein. Patients on the diet eat vegetables, sugar, and starches. Supplements called ketoacids make up for the inadequate level of protein in the diet, preventing protein deficiency. In patients with malfunctioning kidneys, ketoacids can reduce the buildup of the toxic amounts of urea that would otherwise result as proteins are broken down. Walser and his colleagues were the first to develop practical methods for making large quantities of these keto-analogues of essential amino acids in the lab.

A 16-center trial of the regimen involving hundreds of patients has recently ended, and the results will soon be reported. In addition, Walser and his colleagues have just published their fourth study on the diet. The study, in the April 1993 *Kidney International*, shows that the ketoacid-supplemented diet can both reduce biochemical abnormalities and slow the progression of renal failure toward the end stage.

Lorenzo's oil in the limelight

Research is progressing at Hopkins on an even more intractable childhood disease known as adrenoleukodystrophy (ALD). ALD results from a genetic defect in which the patient is unable to make the CoA derivative of long chain fatty acids, resulting in a rapid progression to a vegetative state and death within five years. ALD was portrayed in the recent movie, *Lorenzo's Oil.*

In 1981, pediatric neurologist Hugo Moser developed a blood test for diagnosing this rare genetic disease. The Kennedy Kreiger Institute, a Johns Hopkins affiliate, is one of only two centers in the world where the test is performed. Moser, now in the third year of a five-year clinical trial with more than 250 patients, wants to determine whether the oil can slow the rapid mental and physical deterioration that characterizes ALD as the sheath around nerve fibers is destroyed. So far, the clinical trials with Lorenzo's oil show that it does not benefit those with moderate or severe ALD, but the greatest hope is that the oil will prevent boys who are now asymptomatic from developing the disease. Moser cautions that this clinical trial should not raise hopes prematurely about a cure for ALD. The recent publicity highlights the need for further research, as well as focusing public attention on the current process by which new treatments are brought from the bench to the bedside.

When blood does more harm than good

Reperfusion injury, the idea that tissues are damaged not when blood flow is cut off, but from toxic reactions when it returns, is a theory that occupies researchers in 23 labs throughout Hopkins. This plethora of reperfusion research is aimed at finding potential therapies for stroke, heart attacks, and other ills of interrupted circulation that strike thousands of people each year.

Understanding the mechanism of reperfusion injury suggests that physicians could have more time to treat patients before damage is irreversible. For the first time, researchers may have medicines to prevent tissue death when blood supply is lost, then found.

The culprits in reperfusion injury are free radicals, highly reactive molecules with a violent and disruptive nature. Normally, free radicals, by-products of oxygen, exist in small amounts in cells. An enzyme called superoxide dismutase (SOD) regularly sops up these free radicals, preventing them from wreaking havoc on cells and tissue. But when the oxygen supply is shut off, the building blocks of free radicals accumulate. With the sudden return of oxygen, a

great concentration of free radicals overwhelms the natural SOD defense system, and cells die.

Scientists at Hopkins are fast discovering that free radical damage occurs in a great many tissues and situations. Surgeon-researcher Gregory Bulkley believes that this is a common pathway to tissue damage in diseases as disparate as arthritis, heart attack, pancreatitis, circulatory shock, alcohol damage, and sunburn.

Richard Traystman does some of the country's most significant brain research on reperfusion. He is collecting data on the timing of free-radical production and the point-of-no-return in brain injury in order to plan clinical studies. Preliminary studies on animal brains and hearts show that manipulating SOD does reduce injury.

Current research efforts focus on defining various organs' windows of opportunity, the time during which it is possible to intervene and prevent cell death. In brain tissue, scientists believe the window may be large—close to an hour. Further studies may change the definition of brain death, and even lead to the first-ever therapeutic interventions for ischemic stroke.

Pioneers in the treatment of Marfan syndrome

Prophylactic treatment—both medical and surgical—developed at Hopkins now prevents the life-threatening results of a genetic defect known as Marfan syndrome. This inherited connective tissue disorder results in a dangerous stretching of blood vessels leading to the heart, as well as abnormal height and eye lens dislocation. It affects one in 10,000 Americans.

Almost two decades ago, medical geneticist Victor McKusick was the first to suspect that these disparate symptoms could result from a single defect in one gene of one chromosome. Mapping the gene locations for inherited diseases soon became a consuming interest: McKusick's catalog now includes nearly 6,000 entries, and is expanding at the rate of several a week.

In 1991, Harry Dietz and Clair Francomano, in collaboration with scientists at an Oregon hospital, discovered that a gene responsible for making connective tissue protein is in fact responsible for Marfan syndrome (**Figure 6**). Now Marfan patients can be diagnosed earlier, even prenatally, before symptoms appear. And beginning treatment earlier greatly increases patients' chances of long-term, quality survival.

Further research by pediatrician-scientist Dietz this year revealed a new class of proteins that could provide strategies to change the course of severe forms of Marfan syndrome and other inherited diseases. The new genetic process Dietz discovered involves a nonsense mutation that creates two genetic abnormalities: it gives the body a premature signal to stop making normal connective tissue protein, and it causes the body to produce larger amounts of a defective protein that increases the severity of the disease. Basic research such as Dietz's on how and when genetic messages are read and translated may create more opportunities to intervene at an early stage in the disease process.

Conclusion

Part of the Johns Hopkins School of Medicine mission always has been to provide a climate that inspires scientists on the research faculty to explore the mysteries of human biology at a fundamental level and to apply this knowledge to human health problems. The intellectual architect of the Johns Hopkins Medical Institutions, John Shaw Billings, summarized the Hopkins goal more than a century ago: "To give to the world men [and women] who cannot only sail by the old charts but who can make new and better ones for the use of others."

Integrating research and practice will be one of the grand challenges of the 21st century. But we will continue to reach high. As in the past, great things are expected of Johns Hopkins medicine.

Acknowledgment

Dr. Blake wishes to thank Rachel Wilder, a science writer on the Johns Hopkins School of Medicine staff, for her special editorial assistance with this article. ■

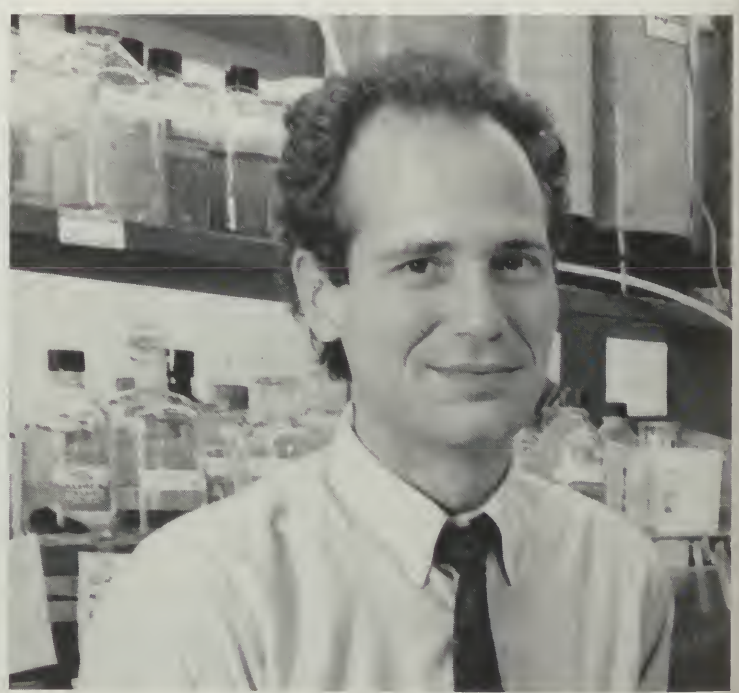


Figure 6. Dr. Harry Dietz (pictured) and Claire Francomano, along with scientists at an Oregon hospital, discovered a gene responsible for Marfan syndrome. (Photo by Robert J. Smith, Jr.)

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For Your Benefit

Coalition highlights the high cost of defensive medicine

The American Medical Association played a major role in a February Washington, D.C., news conference depicting the high cost of defensive medicine. According to survey data released at the conference, America could save some $36 billion over the next five years by eliminating defensive medicine practices. The National Medical LiabilityReform Coalition sponsored the conference.

A report released at the conference stated, "Defensive medicine is care that does not benefit the patient, and is provided solely to avoid malpractice claims."

The coalition's statement pointed out that any reform of the health care system must include liability reform to be complete and effective.

AMA is a major sponsor of the coalition, which includes more than 60 organizations from the business, insurance and medical sectors. Its goal: a compensation system to enhance the objective of quality, cost-effective health care available to all.

AMA presses for redefinition of expert testimony

In a friend of the court brief filed before the U.S. Supreme Court, the AMA advocates that the Court limit expert testimony to opinions founded in scientific knowledge or based on valid scientific methodology. The outcome of the *Daubert v. Merrell Dow Pharmaceuticals* case will determine the legal role of medical expert testimony.

"Expert" opinion without scientific basis has extremely negative effects on physicians, their patients and society as a whole—as well as on the legal process. The *Daubert* case involves expert testimony in product-liability suits that linked the morning sickness drug Benedectin to birth defects. Joining the AMA in this effort are 15 national medical specialty societies and the AMA/Specialty Society Medical Liability Project.

Prepared by the Department of Communications Services. For information, call 800 AMA-3211, ext. 4416.

Group practice growth depicted in AMA survey

The growth of group practices is illustrated in the AMA's newly published "Medical Groups in the U.S.—A Survey of Practice Characteristics." The 1993 edition of the ongoing survey describes the current population of medical group practices and highlights trends.

This growth trend—the number of physician groups has increased by 286 percent since 1965, and the number of physicians involved by 550 percent—has major implications. AMA Executive Vice President James S. Todd, MD, says the move toward group practice "will continue to change the American system of health care delivery and make practice groups important players in any health system reform agenda."

Besides statistical data, the book contains information on governance structure, reimbursement methods, and computerization. Copies are $50 for AMA members, $70 for non-members; call (800) 621-8335 and request OP390393CH.

AMA opposes provider tax

In a letter to HCFA Acting Administrator William Toby, the AMA underscores its opposition to provider taxes—fees imposed on physicians to increase state Medicaid or other revenues.

The AMA further says that final rules on Medicaid donations and health care-related taxes should prohibit imposing "voluntary" donations on physicians on behalf of a specific health care group The current rule fails to specifically forbid coercive donations as a condition of employment or staff privilege.

AMA pledges its opposition to health fraud

The AMA is prepared to work with the government to combat fraud and abuse in the health care field. That was the message to Congress delivered by AMA Trustee Jerald R. Schenken, MD, recently.

Appearing before the criminal justice subcommittee of the Senate Judiciary Committee, Dr. Schenken said the Association strongly agrees with a General Accounting Office recommendation calling for a national commission to develop comprehensive solutions to health insurance fraud and abuse.

He outlined ongoing AMA activities in the area, including cooperation with the FBI and the establishment of a fraud and abuse hotline. The AMA also supports changes in antitrust laws to eliminate barriers to medicine's ability to expand its professional self-regulation and enforcement role, Dr. Schenken told the panel.

Prepared by the Department of Communications Services. For information, call 800 AMA-3211, ext. 4416.

Hopkins implements innovative medical school curriculum

Catherine DeAngelis, M.D.

Dr. DeAngelis is professor of pediatrics, the associate dean of academic affairs, and coordinator of the new curriculum program at the Johns Hopkins University School of Medicine. Her report is based on a lengthy article that appeared in the 1992 fall issue of Hopkins Medical News.

Photos by Bill Dennison.

The Johns Hopkins University School of Medicine has embarked on an unprecedented revision of the curriculum for medical students. The mission, financed in part by a $2.5 million grant from the Robert Wood Johnson Foundation, is to educate physicians capable of meeting the challenges of the 21st century—advancing technology, a shifting economy, a changing demography of the population, and the legion of changes in medical perspective spawned by scientific discoveries.

How it came about

In 1987, a committee chosen by then-Dean Richard S. Ross, M.D. submitted a report on the state of the medical school curriculum. The Brieger Report, named for the committee chairperson, Gert Brieger, M.D., pinpointed broad areas where change would be crucial if Hopkins wanted to be in the forefront of medical education as the medical school's second century neared.

This plan was tabled for a few years to await the impending new dean and administration for the school. In 1990, under the leadership of Dean Michael M.E. Johns, M.D., the faculty again reviewed the status of medical education and began to plan for changes.

In 1987, the Robert Wood Johnson Foundation (RWJF) embarked on a review of medical education in the United States. "We hadn't been involved in medical education before," says Annie Lea Shuster, a senior program officer for the Princeton, New Jersey, philanthropic organization, "but we couldn't seem to overlook this."

The foundation commissioned interviews with 50 of the most prominent individuals in American medicine about the country's major health problems. Medical education was mentioned often.

The findings

The foundation then surveyed deans and department directors in 127 US medical schools, and the respondents agreed that



improvement in medical education was in order. The four problem areas identified were

1. emphasis on research and patient care at the expense of teaching,
2. not enough integration between basic science and clinical teaching,
3. hospital-based clinical training that does not follow patients through the course of an illness, and
4. teaching style that does not engender development of faculty role models or give students lifelong problem-solving skills.

The foundation then offered a $150,000 planning grant to 12 schools that would match its criteria for change. Thereafter, the 8 most competitive of those 12 would receive a larger grant to implement their plans.

Grant speeds timetable

By 1991, we were going to begin our changes with or without outside money, but when we compared our proposed plan with what RWJF wanted, there was so much overlap that we decided to compete for the grant. In 1992, Hopkins received the $2.5 million grant that has certainly speeded up our timetable.

Administrators and faculty members, especially those teachers of first-half courses, have devoted a tremendous amount of time on how to create the needed change. Students also were asked to share in the revision. Representatives from all four classes offered opinions. As a result, Hopkins is in the forefront of needed change in medical education—change that assures us of a second century of excellence in teaching, research, and patient care.

Formal lectures cut back

A major reorganization in instruction is under way. The lack of formal classes in the afternoon, the limiting of lectures by 50%, and the vast increase in small group sessions are some of the curriculum changes. Unlike earlier students, the first-year students' initial clinical experiences begin in the first week of the first year of classes. More outpatient experiences and use of computers and videos are other significant changes. Faculty will phase in the new curriculum year by year as the class of 1996 progresses, making needed adjustments as they go.

At Hopkins, we do not believe that "if it ain't broke, don't fix it." Our philosophy is that it is not sufficient to be somewhere on the arrow pointing the way. We want to be at the very point of the arrow.

We are not abandoning our entire traditional curriculum. There are wonderful aspects that we want to maintain—the components that have allowed us to educate outstanding physicians for a full century. Because of the type of students we attract at Hopkins—they are brilliant and creative—it is tempting to sit back and say, no matter what we do with them, they will learn. We cannot be satisfied with that complacency. We need to build on the students' brilliance and creativity to assure that we will continue to develop leaders in American medicine.

More informed physicians

The medical school also needs to adapt to the fast-evolving world of medical practice, research, and administration, which has changed substantially in the last decade and will certainly continue to change in the foreseeable future. These changes have produced a great deal of stress in medicine, which has, to a great degree, led to our curriculum change.

The outcome should be physicians in better touch with medical advances because of their sharpened ability to understand and thus absorb information in scientific publications. In other words, physicians will have a better grasp of how science applies to the practice of medicine. The new physicians

should have greater awareness of the social, political, and ethical issues of medicine, and consequently possess the philosophical groundwork for making difficult ethical decisions.

The strategy

How do we propose to do this? One of the most basic changes involves introducing patient experiences with community-based physicians from the very beginning. It has been traditional for students to learn the basic, or preclinical sciences, before the clinical. This separation creates the impression that the basic and clinical sciences are loosely related. Unfortunately, the basic sciences are often seen as something to "get through" to reach the "real stuff" of medicine.

A considerable **natural** inclusion of clinical aspects into basic sciences has occurred. Thomas Pollard, M.D., director of cell biology and anatomy and coordinator of the basic science aspects of this first-year curriculum, says this is because of "a wonderful proliferation of understanding of how disease works at the most basic, or molecular, levels." For example, lecturers can describe normal transport processes in cell membranes by citing the latest research on what goes awry in cystic fibrosis.

Patients play a role

But the effort to include clinical aspects into basic sciences does not go far enough. "The clinical material isn't always as nicely focused or tied to patients as it could be in the first year," Dr. Pollard says, "so one thing we're initiating is a part-clinical, part-basic, science seminar on Friday afternoons. We present a patient with a particular clinical problem that ties in all the basic science concepts students get in a particular week. If, say, we've been teaching about motor system control, we might have a patient with myasthenia gravis." Students begin to understand how basic didactic work affects what happens to the patient.

The new *Introduction to Clinical Medicine* program, a program that links each first-year student with one of 60 local community physicians, augments these seminars. It is hard to believe that we have graduated some students who have never spent any time inside a private physician's office except as patients themselves.

Every other week, students spend an afternoon observing physician role models in their offices, absorbing how they relate to people and how a good practice works. The physicians involved in this experience accentuate how a medical problem affects the patient's entire life.

A new course

Medicine does not exist in a social vacuum. Even the one-on-one doctor-patient relationship is based on important concepts of population and community. The physician and resources under his or her direction are a public trust that carries obligations to the physician's community and to society as a whole. This is the essence of a new four-year longitudinal course—*The Physician and Society (PAS)*. The course blends medical ethics with the history of medicine, sociology, law, economics, and literature. "Other schools may have short courses on such topics, but none that approach the scope of a four-year comprehensive one," says Leon Gordis M.D., chairperson of epidemiology and course coordinator.

"The blending of ethics and history makes sense," Dr. Gordis says, because "a lot of ethical issues that confront physicians have emerged as medicine and technology have advanced. If we're creative, we should be able to teach ethical issues in the context of the various stages of medical history."



"Golden opportunity"

"There's also a golden opportunity for *PAS* topics to enhance what students are getting in other courses," Dr. Gordis adds. "When they're studying embryology, for example, it's a good time for *PAS* faculty to address causes of congenital malformation, how to prevent them, the family impact of a disabled child, and challenging issues related to genetic screening."

PAS meets two hours a week during the first two years. One hour is lecture; the second, a small group discussion. As clinical rotations begin, the course will be incorporated into that aspect of the students' experiences. At that point, the small group process will focus on patient-oriented topics. Topics for the entire course include patient confidentiality, ratio of benefit to harm for patients, patient rights (including the right to die and rights of the severely impaired), organization and financing of health care, economics of clinical practice, cultural aspects of health care, disease prevention, and problems of health care delivery.

A study of medical art, drama, fiction, and essays is also included in the course. "The perspective you get from non-physicians looking at medicine and patient problems is one not often seen in medical schools," says Dr. Gordis.

Feelings and attitudes

Clearly, the emotional and social aspects of life are key components of doctoring. A physician could be the best medical mechanic in the world and have all the book knowledge available, but if the physician cannot relate to the patients in their own environment, he or she is a very poor physician. Thus, much of the course is linked to feelings and attitudes, while providing a rational and ethical basis for decision making. The idea, Dr. Gordis says, "is to provide a rigorous scientific base of knowledge and superimpose on it our individual reactions," so students can fit issues such as abortion in a larger, more balanced framework.

"Traditional graduate schools treat students like adults; medical schools typically have not," says educational psychologist John Shatzer, Jr., M.D. He recently came to Hopkins with the mission of keeping the medical school abreast of contemporary teaching and evaluation techniques.

"Most medical colleges have been glorified undergraduate schools—very regimented, with a lecture-exam-lecture pattern in the first half," he adds. "Then there's great floundering for about six months in the second half' when students are expected to mature suddenly and apply what they have learned to patient wards.

Graduate schools do have seminars and other opportunities for students to show that they can absorb information and think creatively about applying it from the start. Students discover what they need to know and set about finding it themselves—precisely the attitude Hopkins hopes to nurture. Faculty members are now engineering bridges for the grade- and test-oriented undergraduates who enter medical school to cross in order to help them become mature lifelong learners.

More unstructured time

"Students need more unstructured time to take more responsibility for their own education," Dr. Pollard says.





"They start out highly enthusiastic and motivated, but that tails off because they have too much to do. They've had as many as five lectures a day in the first year, which leaves them with little time to read their textbooks. They're lucky if they do half of the assigned reading each week. So we've decided on no more than two lectures a day, interspersed with small group sessions. Everything finishes at 1 o'clock."

One solution to the constrained daily time problem is an extended school year—from 36 weeks to 39. The last part of the first year ends with an organ systems approach to understanding more functions. This will provide the transition to the second year, primarily abnormal function, which will be taught entirely by organ systems.

Last fall, pediatric cardiologist Langford Kidd, M.D., director of the second-year curriculum changes, met with the key faculty coordinators of the second year in a marathon Saturday appraisal of their course. They discovered some oversights and some overlap, Dr. Kidd says.

"No communication"

In the second year, for example, "the three major courses—pathology, pathophysiology, and pharmacology—have sailed along like great battleships," says Dr. Kidd. "They're good courses, highly thought of by students, but there's been practically no communication between them. So students might get cardiac pathology, cardiac pathophysiology, and cardiopharmacology in each of the respective courses. And this is wasteful."

Dr. Pollard found, in a separate session, "remarkably little redundancy" in the basic sciences, but discovered that major topics, notably genetics and molecular and cellular developmental biology, were not included.

"Until recently," says Dr. Kidd, "the sciences have been divided into a lot of little baronies—an anatomy department to teach anatomy, physiology to teach that course. But now, all those sciences are doing the same thing—molecular biology—because that's where questions are being answered these days. Yet our teaching has reflected the old divisions.

"Our new plan is to design a unified whole course, planned from the ground up, but at the same time respecting the disciplines that are there." When students learn the cardiovascular system, for example, histologists, physiologists, immunologists and anatomists will cycle in and out of the lectures and labs, giving their unique perspectives on, say, the heart. No more set physiology, histology, or other courses.

"This is much more logical," agrees Dr. Pollard, "and we believe it will raise student mastery of the fundamentals. In addition, with the time it frees up, students will be able to read more. We'll be able to teach at a higher level, and they'll be more responsible for learning."

More research reading

Students read one journal article per week and discuss it in small groups. Both a clinical researcher and a basic scientist are present in each of these groups. The journal article of the week is one related to that week's basic science topics. The students critique and discuss the article with the faculty acting as consultants and mentors. Students learn early how to critically review medical literature, which is a key method of continuing their education throughout their lives.

Consolidating exams

Another alteration of the curriculum involves examinations. Integrated courses, such as the first-year *Molecules and Cells,* which involves five departments teaching one course, require integrated tests and grades. Each department contributes questions to the examination, but one grade is given. Another change is that examinations are given at times less likely to interfere with other courses and more in line with the student's study time. In addition, many tests are now open book, which is much more like the way a physician functions, rather than having students simply memorize facts.

While traditional paper-and-pencil tests efficiently measure learning in the basic sciences, "there's a lot of evidence that we need more than that in other courses," says Dr. Shatzer. "Faculty typically make their inferences about students by the products they see—the write-ups, case presentations, bedside discussions of what they know about the patient."

"It's absolutely surprising," Dr. Shatzer says, "how seldom students in medical schools are observed in direct interactions with patients. If we ask residents, 'What has been lacking in your medical education?,' we invariably get: 'I've never been observed taking a complete history and physical examination.'"

More student feedback

"The other area of general neglect is in providing feedback to students. Grades are just a tiny way of viewing students; grades don't say much about student strengths or weaknesses. For that, you need more direct student-faculty conferences. Yet it's often very difficult for a faculty member to face students and say, 'you're doing this very well, but you have weaknesses here.'" Dr. Shatzer hopes to develop strategies for conferences so faculty can effectively tell students what they desperately need to know.

A new clinical teaching center also will help, Dr. Shatzer says. In 10 rooms equipped with video cameras, students will be able to observe themselves and others in patient interactions. "It's one of the most powerful agents for change that a student can have," says Dr. Shatzer.

"Construction" in progress

The students' clinically based time is still being constructed. We will provide more ambulatory experiences. The pattern of exposing students to a random assortment of extremely complicated patient problems, or to those patients who are in the hospital for short periods of time with all tests prescheduled, provides a skewed teaching situation. We also are planning a specific generalist experience for all students. Finally, the reintroduction of basic sciences into the clinical years, especially the last part of the fourth year, is another challenge.

Faculty also scrutinized

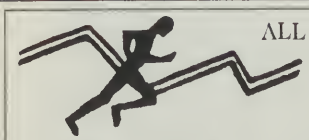
During all this change, the faculty have come under scrutiny as well. We have changed policies for promotion, and now have statements in the faculty policies and procedures manual on the importance of teaching for faculty advancement.

The immediate faculty effect is one of enthusiasm. "Everybody's gotten a big charge out of this," says Dr. Pollard. "We've never done anything quite like this before—never met as such a large group with a common goal—and the attitude is very positive and the commitment strong.

In summary, we do not want to teach medical students what to think, but rather how to think. Also, we are creating an atmosphere and a daily routine that are more humane and more stimulating than any we have had—a system that will sustain the students throughout their careers.

Acknowledgments

Dr. DeAngelis wishes to acknowledge the editorial assistance of John Bartgis and Marjorie Centofanti. ■



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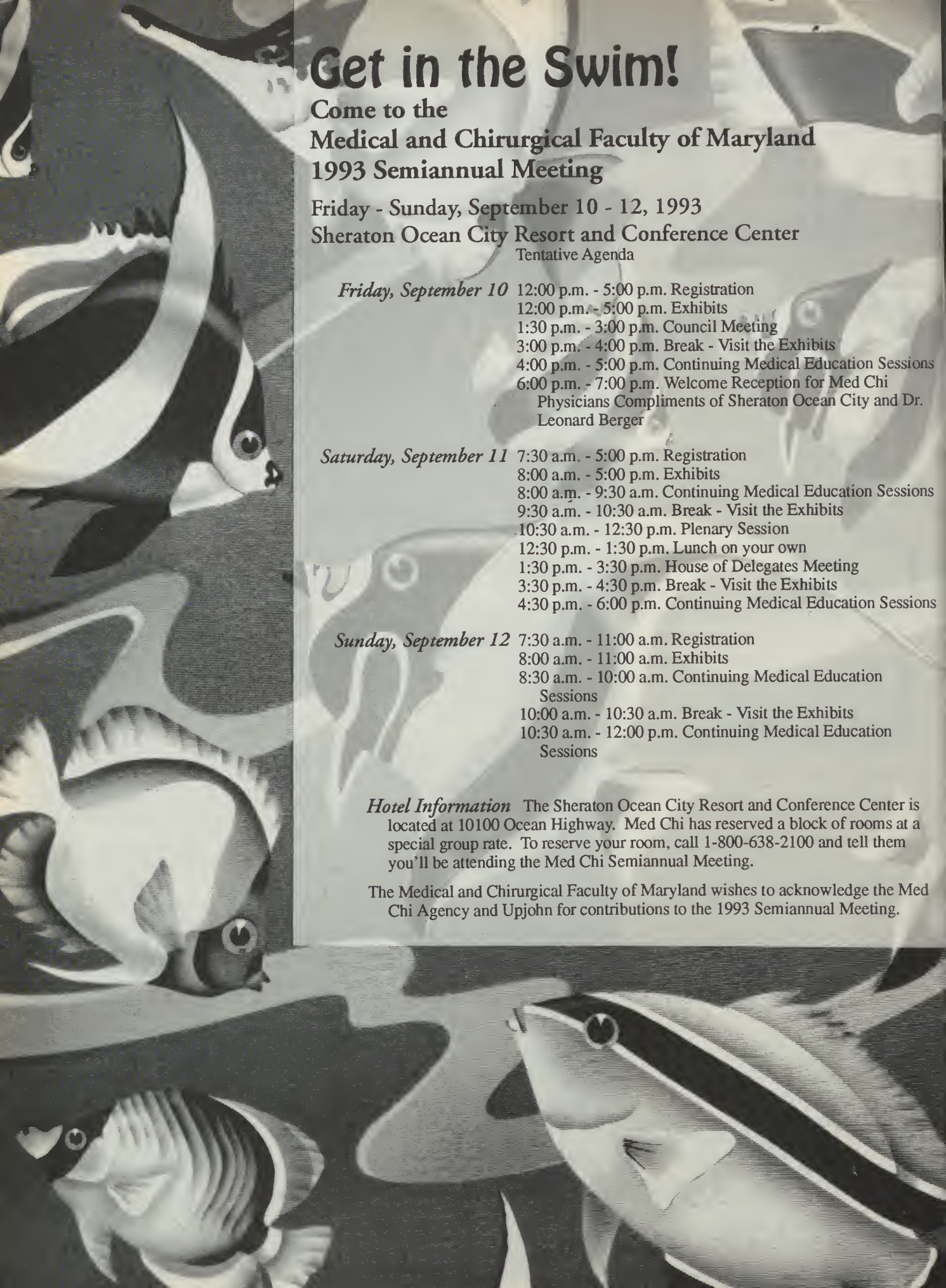
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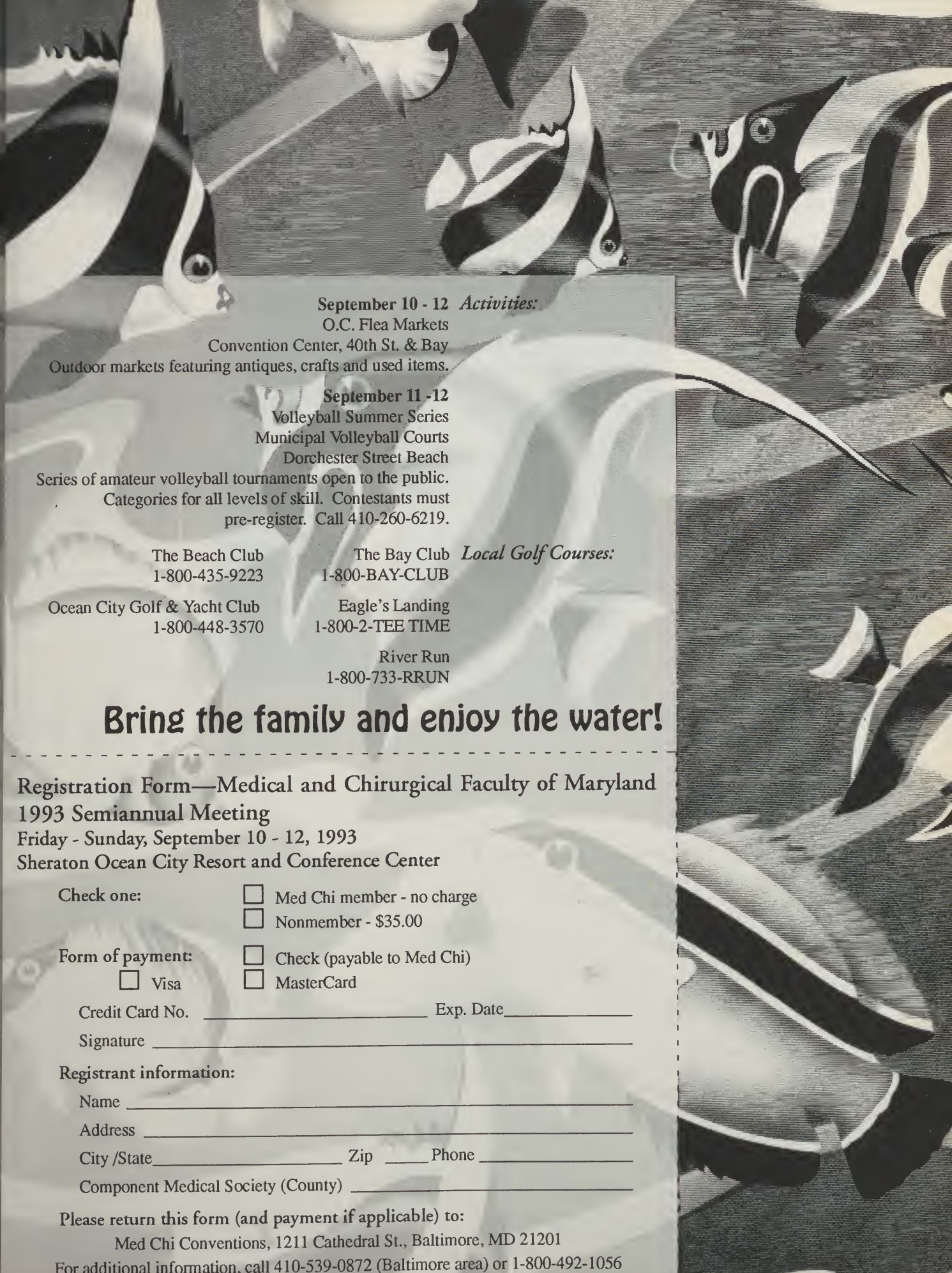
Friday, September 10
12:00 p.m. - 5:00 p.m. Registration
12:00 p.m. - 5:00 p.m. Exhibits
1:30 p.m. - 3:00 p.m. Council Meeting
3:00 p.m. - 4:00 p.m. Break - Visit the Exhibits
4:00 p.m. - 5:00 p.m. Continuing Medical Education Sessions
6:00 p.m. - 7:00 p.m. Welcome Reception for Med Chi Physicians Compliments of Sheraton Ocean City and Dr. Leonard Berger

Saturday, September 11
7:30 a.m. - 5:00 p.m. Registration
8:00 a.m. - 5:00 p.m. Exhibits
8:00 a.m. - 9:30 a.m. Continuing Medical Education Sessions
9:30 a.m. - 10:30 a.m. Break - Visit the Exhibits
10:30 a.m. - 12:30 p.m. Plenary Session
12:30 p.m. - 1:30 p.m. Lunch on your own
1:30 p.m. - 3:30 p.m. House of Delegates Meeting
3:30 p.m. - 4:30 p.m. Break - Visit the Exhibits
4:30 p.m. - 6:00 p.m. Continuing Medical Education Sessions

Sunday, September 12
7:30 a.m. - 11:00 a.m. Registration
8:00 a.m. - 11:00 a.m. Exhibits
8:30 a.m. - 10:00 a.m. Continuing Medical Education Sessions
10:00 a.m. - 10:30 a.m. Break - Visit the Exhibits
10:30 a.m. - 12:00 p.m. Continuing Medical Education Sessions

Hotel Information The Sheraton Ocean City Resort and Conference Center is located at 10100 Ocean Highway. Med Chi has reserved a block of rooms at a special group rate. To reserve your room, call 1-800-638-2100 and tell them you'll be attending the Med Chi Semiannual Meeting.

The Medical and Chirurgical Faculty of Maryland wishes to acknowledge the Med Chi Agency and Upjohn for contributions to the 1993 Semiannual Meeting.



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A Century of Biomedical Science at Johns Hopkins: An interview with Dr. A. McGehee Harvey about this historic publication

Victor R. Hrehorovich, M.D. with Kelly White

ABSTRACT: *Research achievements at the Johns Hopkins School of Medicine over the past century are too numerous to document in anything but a catalog. But a group of Hopkins physicians and researchers compiled a representative sample of papers documenting the intellectual history of the institution, reproducing them in a two-volume text. A discussion with one of the editors, A. McGehee Harvey, M.D., offers some insight into the process of selecting papers to be included in this historic publication.*

Dr. Hrehorovich is editor of the Maryland Medical Journal. *Ms. White is managing editor of* Straight Forward.

As an expression of the Johns Hopkins School of Medicine centennial celebration, a decision was made to reproduce 100 of Hopkins' historical scientific papers in a two-volume text. A committee was formed to sift through documents dating from 1881 to the present and compile a representative sample of papers detailing the evolution of this institution's contributions to medicine. The committee—A. McGehee Harvey, M.D., chairperson; John L. Cameron, M.D.; M. Daniel Lane, Ph.D.; Guy M. McKhann, M.D.; Victor A. McKusick, M.D.; and Paul Talalay, M.D.—spent two and a half years putting these volumes together. Each article is reprinted in its original format, prefaced by commentary by the committee.

What follows is an interview with the chairperson of this undertaking, Dr. A. McGehee Harvey, conducted by Dr. Victor R. Hrehorovich, editor of the *Maryland Medical Journal.* Italicized are excerpts from the two-volume publication titled, *A Century of Biomedical Science at Johns Hopkins.*

Q: How did the idea of republishing these documents develop and how were the articles selected?

A: A number of individuals thought the biomedical science conducted at Hopkins had not been presented in a way that displayed Hopkins' contributions over the century. As Hopkins was celebrating the medical school centennial, it seemed like a good time to do it. It was thought that reproducing the articles with a commentary on the impact each had had on medicine would give people an opportunity to see what has been accom-

plished here and learn how each discovery ultimately fit into the scheme of medical advances.

The objective was to have the books provide an intellectual history of the institution. It was important, the members of the committee thought, to pick out not only the most complex, technological discoveries or those by full-time scientists working in the laboratory, but to include discoveries contributed by students, clinicians, fellows, and trainees—that is, from each level in an intellectual environment where additions to knowledge were primary goals.

The committee identified certain landmark papers that should be included, but also consulted numerous faculty and all department heads for their suggestions. The committee's goal was to include outstanding representative studies. It would have been impossible to identify the 100 best papers. By choosing representative articles, we gave ourselves a little leeway. Some of the papers we looked at were very lengthy with many photographs. So sometimes we had to choose articles that were less lengthy, but just as representative. We also tried to see that all eras and all departments were represented. I'm sure that if another group of six people got together, a certain percentage of the papers would be different, but just as representative.

Q: When you're dealing with such a broad spectrum of activity over 100 years, it's hard to draw any generalizations as to what promotes excellence. But can you identify any common feature that makes the chosen papers different from others?

A: I don't think there's any common feature, and I think that illustrates the diversity of interests in a medical center such as this. One thing that always impresses me is that it's impossible to know the ultimate importance of a given discovery. Take the concept of tissue culture: I don't think anybody at the time it was developed appreciated the impact tissue culture would have. Many of the early tissue culture studies evolved here at Hopkins, and the articles in these volumes well illustrate that. For example, the Lewises' studies defined tissue culture technique, so that one could study quantitatively the physiology and various other aspects of cell growth. Then George Gey came along and isolated the HeLa cell strain, which became the standard tissue culture strain in laboratories all over the world. Tissue culture has been involved in just about anything you want to name—vaccines, pharmacology, genetics—almost any field.

"Having found that tissues from chick embryos grow readily in artificial media, nutrient agar and bouillon, the next step was the attempt to cultivate such tissues in media all the constituents of which are known. In collaboration with Dr. Arthur Koelker we were able to obtain excellent growth in combinations of amido-acids and polypeptids of known constitution, in Locke's solution. Locke's solution with maltose and dextrose was then tried with such good results that Locke's solution was attempted with the very startling discovery that these embryonic tissues grow readily in the Locke's solution and various combinations of NaCl, $CaCl_2$, KCl, and NaH CO_3...."

(Lewis MR, Lewis WH. The cultivation of tissues from chick embryos in solutions of NaCl, $CaCl_2$, KCl and $NaHCO_3$. *The Anatomical Record* 1911; 5(6):277–93.)

"This is a report of an evaluation in vitro *of the growth potential of normal, early intra-epithelial, and invasive carcinoma from a series of cases of cervical carcinoma. Comparable cytological and tissue culture studies were actually carried out on selected biopsies of normal and neoplastic areas of the same cervix. Thus far, only one strain of epidermoid carcinoma has been established and grown in continuous roller tube cultures for almost a year. It grows well in a composite medium of chicken plasma, bovine embryo extract, and human placental cord serum. The autologous normal prototype is most difficult to maintain under comparable cultural conditions. Most of the tissue from other cases showed rapid keratinization of the cells grown in cultures whether from normal or neoplastic areas...."*

(Gey GO, Coffman WD, Kubicek MT. Tissue culture studies of the proliferative capacity of cervical carcinoma and normal epithelium. *Cancer Research* 1952; 12:264–65.)

There are many other examples in these books of research that would have a significant impact, such as the "blue baby" operation, which opened people's eyes to the potential of heart surgery; it was the start of modern cardiovascular surgery. Another example is sulfonamides, which were first used in this country at Hopkins. Dr. Marshall devised a technique for measuring them; he was a major architect of the science of chemotherapy. It was also Marshall who demonstrated renal tubular secretion.

"Heretofore there has been no satisfactory treatment for pulmonary stenosis and pulmonary atresia. A 'blue' baby with a malformed heart was considered beyond the reach of surgical aid. During the past three months we have operated on 3 children with severe degrees of pulmonary stenosis and each of the patients appears to be greatly benefited."

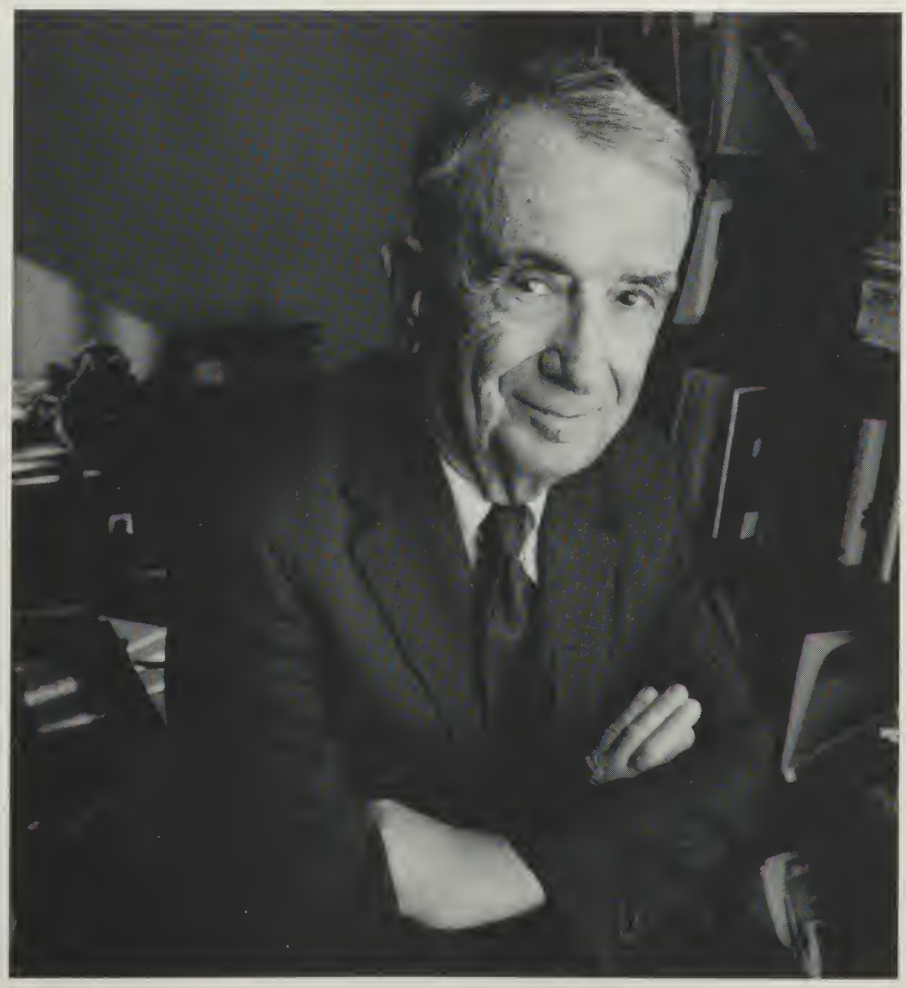
(Blalock A, Taussig HB. The surgical treatment of malformations of heart in which there is pulmonary stenosis or pulmonary atresia. *JAMA* 1945; 128(3):189-202.)

"...the evidence which is presented in this communication would seem to prove definitely that the elimination of phenolsulphonephthalein by the kidney cannot be explained entirely on a filtration and reabsorption theory but that the addition of a process of secretion of the substance by the convoluted tubules is necessary."

(Marshall EK Jr, Vickers JL. The mechanism of the elimination of phenolsulphonephthalein by the kidney; a proof of secretion by the convoluted tubules. *Bulletin of the Johns Hopkins Hospital* 1923; 34(383):1-7.)

The first paper in volume 1 was written by Newell Martin, who conducted his research at a Hopkins university laboratory. He was the first professor of physiology, although he didn't live long enough to actually serve after the medical school opened. He devised a technique for using the isolated mammalian heart for studies of all kinds of things; for example, the actions of drugs and cardiovascular physiology. Developing a technique for perfusing the coronary arteries was probably one of the greatest discoveries ever made in an American physiology laboratory.

Figure 1. A. McGehee Harvey, M.D., professor emeritus of medicine.



"In the course of some experiments made by me in conjunction with Dr. W.T. Sedgwick, on blood pressure in the coronary arteries of the heart, the fact was impressed upon me that the mammalian heart is no such fragile organ as one is usually inclined to assume, but possesses a very considerable power of bearing manipulation.... The above experiment...justifies no conclusions except that an isolated mammalian heart can be kept beating for several hours. It, however, suggests...that the pulse rate of the isolated heart is very independent of arterial pressure, though, as no accurate temperature observations were made in this case, the experiment by itself is not worth much in that respect."

(Martin HN. A new method of studying the mammalian heart. *Physiological Papers.* Baltimore: Johns Hopkins Press. 1895; 1–11.)

Dr. Tumulty's paper, on what is an effective clinician, is the last paper in volume 2. It illustrates that in spite of the fact that these books emphasize the scientific history of this institution, just as much importance has been attached to teaching clinical medicine and training doctors.

"A clinician is one whose prime function is to manage a sick person with the purpose of alleviating the total effect of his illness. The multifocal character of the impact of illness upon the patient and his family is stressed. Clinical evidence is the material with which the physician works, and a meticulous history and physical examination are paramount. The availability of more specific forms of therapy requires a clinician to be more of a scientist and, at the same time, more expert in clinical methods. Ability to listen and to talk, so that valid clinical evidence is gathered, anxieties are dissipated, and understanding and motivation are instilled, are the clinicians' greatest assets."

(Tumulty PA. What is a clinician and what does he do? *N Engl J Med* 1970; 283:20–24.)

There's also a wonderful article by Dr. Temkin on the role of surgery and the development of medical teaching. It shows the importance of the history of medicine. I could go on and on in terms of the various aspects of biomedical science addressed in these books. The range is so broad. I don't think there's any one lesson to learn from these articles except for the importance of creating an environment where the search for new knowledge is equally as important as teaching knowledge that already exists.

"Surgery, for many centuries, had relied on an objective anatomical diagnosis. In turning to a localized pathology, medicine adopted a point of view prevalent among surgeons. In part at least, the reorientation of medicine was due to an increasing approximation between medicine and surgery during the 18th century, with pathological anatomy and experimental physiology as a common ground cultivated by both disciplines. Because the reorientation of medicine took place within a relatively short period and led to dramatic results in diagnosis and nosology, it has impressed us more than the steady advance of surgery. And since surgery, in its practical possibilities, was still restricted until the advent of anesthesia and antisepsis, medicine has appeared as the progressive branch while surgery has seemed to lag behind."

(Temkin O. The role of surgery in the rise of modern medical thought. *Bulletin of the History of Medicine* 1951; 25:248–59.)

Q: It appears that the interchange of ideas between people within different departments and different orientations was an important stimulus to new perspectives and discoveries. Do you agree?

A: Of truly vital importance in the advance of medicine is the atmosphere in a given institution. In these books, we wanted to stress how the atmosphere at Hopkins contributed to research successes. We point out that there were originally two major research laboratories—Martin's at the university and Welch's at the school of medicine. Many who worked in Martin's laboratory later became professors in the school of medicine. The scientific base of the institution was created right in the beginning, so when the hospital opened, the atmosphere was already established. Diversity was already a part of the hospital environment; all departments knew from the beginning that the exchange of ideas between departments was one of their missions.

As Dr. Mall said, "Disease is the price of ignorance." One purpose of the medical school was to dispel ignorance and develop

new knowledge. These two books represent the intellectual history of the institution.

Q: Can you predict in what areas major advancements will be made at Hopkins?

A: The whole field of genetics is changing the face of medicine. Most people think the advances have been rapid and great in the last 100 years. It won't be many years, however, before medicine is so different that it will be hard for those of us today to recognize it. With what's going on now, the future is mind-boggling. I'm not capable of predicting what is going to happen in specific terms, but Dr. Welch made a correct prediction in the early 1930s that there were going to be tremendous advances in medicine that would make medicine unrecognizable 50 years from that time; I think that is true in spades now.

Q: What are the promising areas in terms of genetic research?

A: Two of the most important articles in these volumes are concerned with the Nobel-prize winning work of Dan Nathans and Hamilton Smith, who developed DNA technology and opened up that whole field.

There is almost no department at Hopkins that is not immersed in the search for the gene involved in one or more diseases or in mapping genes. The study of genetics is clearly going to be with us for a long time. It's amazing what one can do now based on current genetic information and what will be made possible in the near future.

"In the past 7 to 8 years we have witnessed the development of a new DNA technology that has fundamentally altered our approach to modern genetics. The basic ingredients of this new technology are the cleavage site-specific restriction enzymes: a special class of bacterial endonucleases that can recognize specific nucleotide sequences in duplex DNA and produce double-stranded cleavages. A collection of these enzymes, each with its own particular sequence specificity, can be used to cleave DNA molecules into unique sets of fragments for DNA sequencing, chromosome analysis, gene isolation, and construction of recombinant DNA. The latter, together with the concept of molecular cloning, has given birth to the new field of genetic engineering, and from this many new and exciting medical and research applications are expected."
(Smith HO. Nucleotide sequence specificity of restriction endonucleases. *Science* 1979; 205(4405):455-62.)

"As an initial experiment, I planned to survey the known restriction endonucleases for their ability to cleave SV40 DNA. On my return to Baltimore in the summer of 1969, DNA in hand, our dissection of the SV40 chromosome began.... In time it should be possible to make out the basic regulatory mechanisms used by plant and animal cells, and eventually to understand some of the complex genetic programs that govern the growth, development, and specialized functions of higher organisms, including man."
(Nathans D. Restriction endonucleases, simian virus 40, and the new genetics. *Science* 1979; 206(4421):903-9.)

Q: Over a long period of time, you have written a lot about Hopkins. Working on this particular project, has your perspective changed in any way or has it reaffirmed your previous beliefs concerning prerequisites for excellence?

A: Things have moved so rapidly since I retired I couldn't keep up with all the recent details by any means, but that's how I got interested. There has been much written about the history of Hopkins but, until recently, not so much about research and discovery. I hope people will enjoy these books. They're encyclopedic in a way. You can pick them up and get distinct detail about what somebody did without having to spend hours in the library. I found many surprises along the way myself. I recognized the importance of things I was not aware of in the various specialties. That was the nice thing about having input from various departments. Someone with knowledge in a specialized field could point out the importance of contributions that I would not be able to evaluate; I wouldn't have known the difference from the run-of-the-mill paper in some fields.

We had a lot of help choosing the papers. It's interesting that even technicians made important contributions in some of these papers. What we tried to do is show that Hopkins has always been a community

of individuals trying to improve medical knowledge and the ability to provide good medical care. I think that still exists. It is one of the unique underpinnings of this particular school; the people at Hopkins from the beginning created a sense of community and interchange. That attitude allowed one to cross departmental barriers. Interdepartmental collaboration, willingness, and openness have always been a hallmark at Hopkins.

Q: Looking at these papers, one sees different fields interacting with each other to arrive at new concepts. Is that the key to institutionalizing excellence?

A: An important advantage for students is working and studying where scientific research is in progress. As a result, students learn how to become critical of new things they encounter in the future. They aren't overwhelmed by techniques that may or may not represent a major advance. They became critical in evaluating what to do, and, as a result, become better doctors. Many Hopkins students have been stimulated to participate in research as illustrated by the fact that there are a number of papers in these volumes contributed by students.

In addition, as I mentioned before, the papers in these books don't just focus on the technical aspect of research. A number of papers illustrate new methods of training and teaching. For example, there are articles by Halsted and Osler describing their methods of teaching and another by Cushing presenting a new method of teaching students about surgical technique. Harvey Cushing established the Hopkins animal research laboratory years ago; he made it possible to teach surgery to students through actual experience.

"Surgery, like other branches of the healing art, has followed in its progress zigzag paths, often difficult to trace. Now it has seemed to advance by orderly steps or through the influence of some master mind even by bounds; again it has stumbled apparently only from error to error, or has even receded; often there has appeared some invention or discovery for which the time was not ripe and which had to await for its fruitful application or perhaps its rediscovery a more favorable period, it might be centuries later."

(Halsted WS. The training of the surgeon. *Bulletin of the Johns Hopkins Hospital* 1904; 15:267–75.)

"Emphasis is laid at the same time upon the fact that the operation is not the beginning and end of surgery, but a therapeutic measure alone; and that those employing this manner of treatment must have the same knowledge of disease, the same ability to make examinations, the same instincts to follow pathological material to the laboratory and to investigate there the causes and symptoms of disease, as should characterize any other well-trained members of the body medical."

(Cushing H. Instruction in operative medicine. With the description of a course given in the Hunterian Laboratory of Experimental Medicine. *Bulletin of the Johns Hopkins Hospital* 1906; 17(182):123–34.)

Q: Looking over these papers, it appears that clinical advances occurred because of an environment that stressed the importance of research and education. Would you comment on that?

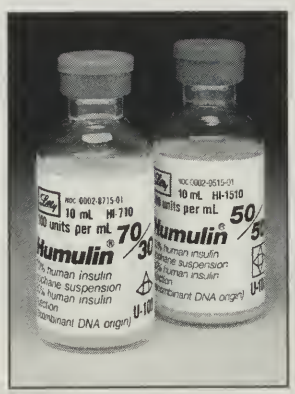
A: The creation of an appropriate environment is crucial when you run across something unusual that you had not been looking for. With the right environment and atmosphere, your mind is prepared to recognize something unusual or unexpected when you see it. Dr. Blalock's article, in which he summarizes the nature of discovery, tells it best: "The idea is the seed," said Blalock, quoting Claude Bernard. "The method is the earth furnishing the conditions in which it may develop, flourish and give the best fruit according to its nature. But as only what has been sown in the ground will ever grow, so nothing will be developed by the experimental method except the ideas submitted to it." (Blalock A. The nature of discovery. *Ann Surg* 1956; 144: 289.) ■



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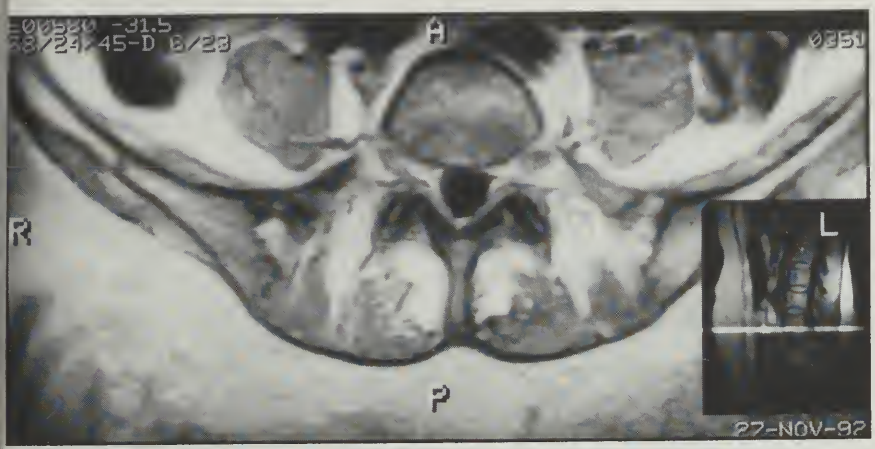
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T-1 Axial MRI image through the L-5 S-1 disc level. Notice the sagital insert showing exactly where this slice is taken.

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T-1 Midline Sagital Lumbar Spine MRI of a normal spine.

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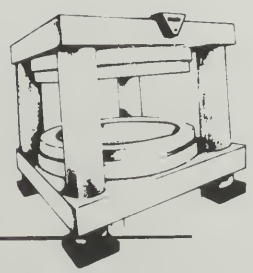
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Paul J. Killian, M.D.
Mary Spece, Office Manager
Arthritis And Rheumatic Disease Associates
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The physician's role in Workers' Compensation

Workers' Compensation is a no-fault insurance program established by state law that all employers, having one or more employees, full- or part-time, are required to have. For employees to receive insurance benefits, they must have sustained an unintentional injury or occupational disease arising out of, and in the course of, employment. The cost of Workers' Compensation insurance is borne entirely by the employer.

Injured employees are responsible for reporting any unintentional injury to the employer immediately, as a delay may affect claims. If a claim is found to be compensable, weekly benefits and all medical bills related to the injury will be paid by the employer or insurer. Employees receive weekly benefits (temporary total disability payments) and full medical coverage for as long as they are unable to work due to the unintentional injury or until maximum medical improvement has been reached.

Temporary total disability payments equal two thirds of claimants' average weekly wage, not to exceed the state's average weekly wage for the year in which the injury occurred. For 1993, the state's average weekly wage is $494. If claimants are not capable of returning to their job or a comparable one for which they are qualified, they may be eligible for vocational rehabilitation and training. In the event of a permanent disability, injured workers receive weekly benefits for a specified time period based on the type and extent of their permanent disability. Benefits for workers who have been totally and permanently disabled may continue indefinitely. Medical evaluations are usually required to establish the nature and extent of any permanent disability.

Overseeing the Workers' Compensation Insurance Program is the Workers' Compensation Commission, which is self-supporting from assessments on insurance carriers. It is composed of 10 commissioners appointed by the governor. The commissioners adjudicate disputes without juries by means of a hearing process similar to the court system. Appeals of the commissioners' decisions may be taken to the Maryland court system.

Physicians and other health care providers play a role from the time workers sustain an injury until their eventual return to work or, in the event of more disabling injuries, indefinitely. The specifics of medical intervention can perhaps be best understood by answering the most frequently encountered questions received at the medical examiner's office.

▲ As a physician, do I need special qualifications to treat an injured worker?

No. In Maryland, any licensed health care provider may treat injured workers.

▲ How do I know if my patient really has a job-related injury?

The usual history taking will generally reveal if an injury has occurred. In the case of symptoms related to chronic use such as repetitive motion injuries, or certain medical illnesses, the relationship may not always be clear. In these situations, it is advisable to call a worker's employer and request authorization for nonemergency treatment. The authorization request can generally be handled by your office staff. In the event of an emergency, care as usual must be rendered.

▲ Must I treat Workers' Compensation patients?

No, not in the elective situation.

▲ For what kind of paperwork am I responsible?

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▲ Must the bill be sent on any particular insurance form?

Most companies will accept HCFA (Health Care Financing Administration) 1500 forms, super bills, or various computer-generated bills.

▲ Is CPT coding necessary?

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▲ If I get authorization to treat a patient in my office, and surgery or other complex treatment is necessary, will the initial authorization suffice?

Not necessarily. If surgery is indicated, your office staff should always ask whether additional authorization is required. Similarly, for prolonged treatment plans, such as multiple procedures or other reconstructive or rehabilitative treatments, it is wise to obtain authorization **in writing**, outlining your program and fees, especially if they exceed those listed in the *Maryland Fee Guide.*

▲ **Does Maryland have a fee guide?**

Yes. Employers and insurers are required to pay at least the fees outlined in the fee guide. Unusual services should be explained using standard modifiers. A copy of the *Maryland Fee Guide* costs $6 and may be obtained by contacting the Supply Division of the Workers' Compensation Commission at 410-333-4754.

▲ **I sent the insurer a bill three months ago for a routine service and have not heard anything. What should I do?**

Generally, if you have not received payment on a Workers' Compensation claim in six to eight weeks, you should contact the insurer for an explanation; your bill may not have been received, a CPT code might be awry, documentation might be necessary, or the claim might be being contested.

▲ **How can the payment for the claim be contested if I received authorization for treatment prior to treating the patient?**

In rare cases, claims the employer thought were work related, are found by the insurer to be non-work related. In these situations, a claimant's health insurance company would be billed instead of the Workers' Compensation insurance carrier. The reverse also happens; a worker may be unaware that the injury or illness being treated is actually work related, and billing, which was initially sent to the health insurer, has to be rebilled to the Workers' Compensation carrier. In this latter situation, any payments received from the claimant's health insurer must be returned.

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This is a gray area as the provider is always certain that the fee is appropriate, and the insurer has a wealth of data on how much of a payment to make. A conversation with the insurance claims supervisor may resolve the dispute. If not, a C-51 form sent to the medical examiner's office will generate a review.

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atrophy, in addition to the more standard areas of loss of function and range of motion. This, unfortunately, makes the determination more subjective.

▲ **I have been told that the review process at the medical examiner's office is significantly backlogged. What is the current status?**

The medical examiner's office has had, over the years, a considerable number of C-51 forms to review, and only recently has been able to obtain help with the review process. The current backlog should be completed with the help of outside vendors by April 1993.

▲ **My patient's lawyer says send him the bill and he will take care of it. Should I?**

Send the bill to the insurer and deal directly with the insurer. Lawyers may require medical records and a copy of the bill in support of your patient's claim. Generally, there should be no problem sending the material at routine costs involved in copying. If a narrative is requested, appropriate additional charges are reasonable.

▲ **My patient wants release slips for going back to work. Do I have to fill out this additional paperwork?**

Most patients cannot return to work without a release slip from their treating physician. Failure to provide this can jeopardize a claimant's employment and cause legal proceedings to be brought against the treating physician.

▲ **My patient really needs a surgical procedure and the insurer is dragging its feet. What can I do about this?**

There is an emergency hearing format for this situation with which your patient's lawyer should be familiar. Such hearings can be scheduled within 14 days. If your patient is not represented, tell the patient to contact the Workers' Compensation Commission at 410-333-4704 or 333-4261. (The toll-free number within Maryland is 1-800-492-0479.)

▲ **I believe that certain fees in the fee guide are inappropriate. When does the fee guide get reviewed?**

Recommendations are made to the Workers' Compensation Commission biannually based on monthly hearings held by the Medical Fee Guide Committee during the intervening two years. The commission conducts public hearings on proposed changes and, following the hearings, adopts the fee guide as per agency regulation in accordance with state procedures.

▲ **How is the multiple procedure rule used in the *Maryland Fee Guide?***

You should file your procedures according to expense, with the highest paying procedure listed first. It will be paid according to the fee guide at 100% for the most expensive procedure, 75% of the cost of the next most expensive procedure, and 50% of the cost of all additional procedures performed at the same time.

▲ **I looked in the *Maryland Fee Guide*, and it does not have the CPT code for the procedure I performed.**

The fee guide is updated every two years, and the CPT codes are published annually. Consequently, the *Maryland Fee Guide* is unable to publish the most recent codes in the AMA guide. The most recent codes have no relevant fee structure developed for them and, even if they could be included in a timely manner, there would not be a basis to assign fees for the newer procedures. In addition, some procedures that would rarely involve compensable claims, such as pediatric or gynecological procedures, have been purposely omitted. The absence of a procedure in our fee guide does not absolve the insurer from the responsibility for providing payment for that procedure. It does, however, present a problem when the provider and the insurer cannot agree on the appropriate payment for the procedure. When this occurs, the appeals process outlined above may be used.

▲ **Does the fee guide pertain if the Maryland worker is injured out of state?**

Yes. The fee guide is in effect for the payment of any bill for a worker employed by a Maryland-based company. The patient, again, is not responsible for any bill balance not paid by an insurer.

▲ **Where do I obtain the AMA guide to *The Evaluation of Permanent Impairment?***

The book may be obtained from the AMA by calling 1-800-621-8335.

▲ **Is there a statute of limitations on a Workers' Compensation bill?**

No. There is no limitation. A bill can be filed at any time subsequent to the performance of the provider's service.

I hope the above remarks have given you some insight into the physician's role in the Workers' Compensation process. As this is an overview article, there may be specific questions that you or your office staff have regarding Workers' Compensation. The medical examiner's office welcomes these questions at any time. Please call 410-333-4709.

NEIL A. ROBINSON, M.D.
Dr. Robinson is a practicing general surgeon in Baltimore, Maryland, and medical examiner for the Maryland Workers' Compensation Commission. ■

Workers' Compensation: A physician survey

The Med Chi Committee on Managed Care and Third-Party Liaison has received a significant number of complaints concerning Workers' Compensation over the years. We hope that Dr. Robinson's article has helped, but we are also trying to monitor and resolve some of the problems. In this context, we are asking you to take a few minutes to fill out this questionnaire and send it back as soon as possible.

Please type or print ***clearly.***

---

1. In what type of medical setting do you practice? *(Check all that pertain.)*

   ❑ Group ❑ Solo ❑ HMO ❑ Other:_____

2. What is your specialty? *(Check all that pertain.)*

   ❑ Family Practice ❑ Internal Medicine
   ❑ Orthopaedics ❑ Surgery (subspecialty):_____
   ❑ General Practice ❑ Neurology
   ❑ Other:_____

3. If you **accept** Workers' Compensation cases, what percentage of your practice consists of Workers' Compensation cases? _____% (Go to question 5.)

4. If you **do not** accept Workers' Compensation cases, please explain why. (Go to question 15.)

   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____

5. On average, how long does it take to get authorization to treat patients?_____

6. On average, how long does it take to get reimbursed for your services?_____

7. If you have had to file because of a denial, how long did it take to get an answer?_____

8. If you have billed according to the Workers' Compensation Commission fee schedule, have your bills been further reduced by the commissioner?

   ❑ YES ❑ NO

Workers' Compensation: A physician survey

9. If you have had to call Workers' Compensation, have you had your calls answered in a timely manner?

❑ Always ❑ Most of the time ❑ Sometimes ❑ Rarely ❑ Never

10. During the last six months, what percentage of your patients have had treatments delayed more than two weeks because of delays in obtaining a second opinion or "an independent medical examiner"? _____%

11. What percentage of your patients who have used Workers' Compensation have been satisfied with the system? _____%

12. How often are your fees reduced below the Workers' Compensation Commission fee schedule? _____%

13. What do you think are the biggest problems with Workers' Compensation? _____

FOLD HERE

FOLD HERE

14. What do you think are the assets of Workers' Compensation? _____

15. Any further comments you would like to make: _____

Thank you for your cooperation. We will share the responses with you in a future issue of the *MMJ*.

Please fold on the line, seal with tape, and stamp.

FOLD HERE

Rose M. Matricciani, R.N., J.D.
Chief Operating Officer
Med Chi
1211 Cathedral Street
Baltimore, MD 21201-5585

TAPE HERE

From the Editor's Desk

Update on Blue Cross and Blue Shield of Maryland

The appointment of William L. Jews as the new Blue Cross and Blue Shield of Maryland (BCBSM) president and CEO (chief executive officer) became effective on April 1. This occurrence, however, was not the only event to bring the state's largest nonprofit health insurer to the public's attention during March and April. Other reported issues included several law suits filed against current and former company executives, BCBSM's proposal to the insurance commission to collect cost-saving data through InforMed, and the fate of Insurance Commissioner John A. Donaho in his efforts to gain tighter control over the Blues.

Law suits

In the autumn of 1992, a United States Senate subcommittee reported that BCBSM had lost $120 million as a result of mismanagement, excessive executive spending, and misdirected subsidiary business ventures. The report set the resulting loss in subscriber funds at $120 million.[1]

On March 23, Attorney General J. Joseph Curran, Jr., urged the directors of BCBSM to investigate whether the corporation should sue several of its former executives. He cited the contents of the US Senate subcommittee report and information gathered by private attorneys as the basis for his recommendation to the BCBSM directors. Mr. Curran indicated that law suits from other sources were imminent and that the corporation has the best legal standing to sue. His request to the directors is a preliminary step before any outside party can file suit.[1]

A day after Mr. Curran's request, two attorneys, representing what they described as a cross section of subscribers, also asked Blue Cross directors to sue former executives for gross mismanagement.[2] In response to this request and to Mr. Curran's request, the directors of BCBSM hired the Washington law firm of Kirkpatrick and Lockhart to conduct an independent investigation. Based on the findings, the directors intend to decide whether to pursue a lawsuit.[3]

On March 31, 1993, the two private attorneys filed suit against 10 current and 8 former executives on behalf of five subscribers. The law suit charges the defendants with gross mismanagement, negligence, personal use of corporate funds, and breach of trust. The suit also names the consulting firm of Booz, Allen & Hamilton, Inc. as a defendant. BCBSM itself is not a defendant in this suit. If successful, the plaintiffs intend to return the $145 million dollars sought by the suit to company funds.[4]

BCBSM year-end review

In April 1992, BCBSM issued a *Report to Our Customers: A Fourth Quarter Report and Year-End Review of 1992* in an attempt to keep its 1.4 million customers well informed. The report summarized money earned and spent including, at year end, $1.46 billion received from customers, $1.27 billion paid for health care expenses, $158.4 million paid to administer benefits, and $40.8 million added to the surplus.

The report went on to highlight fourth quarter initiatives in six areas.

1. BCBSM improved its financial position by reducing the number of active subsidiaries and administrative expenses, eliminating certain marketing expenses, and beginning a review of the expenses associated with its Owning Mills buildings.
2. Administrative expenses are expected to fall below those of 1992 due to the elimination of some marketing expenses, centralization of key internal staff areas, a decrease in the use of consulting services, a freeze on hiring, and a tightening of controls on executive compensation packages.
3. To improve its National Management Information System rating, which measures the effectiveness of customer service, BCBSM reassigned employees to service areas, redesigned work flow, increased management attentiveness to service delivery, signed a contract with Electronic Data Services to increase submission and improve accuracy of electronic claims, began a collaboration with the Maryland Hospital Association to develop pilot technology projects to speed up claims processing, and began addressing claims processing, quality assurance, Medicare secondary payer, and service performance.
4. To improve communication with all its constituencies, BCBSM began publishing quarterly reports for customers and regular submission of claims, subsidiary, and BCBSM information to the Maryland Insurance Division.
5. The board separated the roles of CEO and chairperson to better maintain a system of checks and balances in the company. The CEO now reports to the chairperson and, ultimately, to the BCBSM Board of Directors. To increase oversight of operations, the board formed three new committees: Finance, Public and Community Affairs, and Claims and Service.
6. A new senior management structure, designed to simplify reporting relationships and increase accountability, was established.

The report also summarized BCBSM's community involvement, stating that no more than 2% of its pretax income goes to charitable cash contributions. The report closed with highlights of BCBSM's base business and subsidiaries, and a summary of new products. Free copies of the report may be obtained by calling 410-998-5730. ■

BCBSM responds to physicians' questions

On February 24, 1993, BCBSM executives, including Frank A. Gunther, Jr. (board of directors chairperson), Arthur T. Keefe, Jr., M.D. (then vice president and corporate medical director), and William Beasman (acting chief executive officer), spoke to Med Chi physicians at a meeting held in Osler Hall (see From the Editor's Desk. *Md Med J* 1993; 42(3):299-300). At the meeting's conclusion, the BCBSM executives urged physicians who had not had the opportunity to pose questions to submit them in writing. Following are BCBSM's responses to questions submitted by the Maryland Chapter of the American Academy of Pediatrics.

Q: What research did BCBSM do prior to implementing 24-hour discharge that indicated it was safe for mother and baby?

A: The target lengths of stay for maternity admissions were developed after careful evaluation of both local and national admission data. Our research revealed that the trend for admissions for **uncomplicated vaginal delivery** had been decreasing such that the average length of stay in Maryland hospitals in 1990 was barely two days. By 1991, the length of stay continued to decrease, and during that year, a number of hospitals already were employing a one-day length of stay target. In fact, there are several hospitals that in 1991 and through the present, do not routinely admit patients at all if their vaginal deliveries have been uncomplicated.

With respect to national length of stay norms for obstetrical delivery as well as other medical conditions, MMS uses the Western Region of the Professional Activities Survey (PAS) data as a guide. These data, which are compiled from hospitals across the United States, reveal that since 1989 the average length of stay for **uncomplicated vaginal delivery** has been one day.

Please bear in mind that our target length of stay of one day is for uncomplicated vaginal deliveries only.

Q: How many deliveries have there been since this policy was implemented?

A: We do not have these data available at this time.

Q: What is the average savings per delivery for reduction of two hospital days?

A: Prior to implementation of our target of a one-day length of stay for uncomplicated vaginal delivery, the average length of stay for such admissions was two days. Hence, **any savings would relate to one day per admission**, at an average rate of $700 per day (mother's and baby's room/board combined).

Q: What is the total amount of money not paid out by BCBSM since the inception of this policy?

A: Data not available. In any event, it would be difficult to determine whether admissions of one day (or no hospital admission at all) for uncomplicated vaginal delivery are due to the existence of BCBSM's length of stay (LOS) target or are due to patient preference/physician practice.

Q: What is the total amount of money not paid out by BCBSM per year?

A: Data not available.

Q: What is BCBSM reimbursing GBMC/Diversified for each newborn visit?

A: BCBSM does not disclose reimbursement or other information on a provider-specific basis.

Q: How many other groups across the state are doing home visiting?

A: We are aware of several home care agencies who are providing services to mother/baby subsequent to a one-day admission.

Q: Is there any information that home visiting is not cost-effective?

A: Home care is cost-effective when it is in lieu of hospitalization.

Q: What are the hospital readmission rates for newborns discharged at 24 hours?

A: Data not available.

Q: What funds has BCBSM paid out for babies discharged too early?

A: Data not available.

Q: What costs does BCBSM absorb for an infant with PKU or other hereditary metabolic disorders that are not found early?

A: Data not available. The implication of your question is that care costs would increase because of BCBSM instituting a LOS target of one day for uncomplicated vaginal deliveries. **The reduction in length of stay guidelines that BCBSM and the majority of other insurers and HMOs have implemented should have no bearing upon early detection through PKU testing, as the test should be performed in the hospital's outpatient department or in the pediatrician's office if it is not done prior to discharge from the hospital.**

Q: Or are most of these costs to the state for institutionalization?

A: Data not available.

Q: What remedies does BCBSM have for the fact that 26% of the babies administered a hereditary metabolic screen (PKU) are receiving a report of insufficient milk feedings?

A: PKU tests can be and are administered on an outpatient basis, once the infant has received sufficient feedings. It is not medically necessary to keep a baby hospitalized solely so that there is adequate milk intake for a PKU to be performed. In addition, the state of Maryland requires that a follow-up PKU be performed when the infant is six weeks of age, and these customarily are done outside the hospital setting.

Q: Does BCBSM regard the hereditary metabolic screening as a cost-effective, medically necessary part of pediatric care?

A: BCBSM recognizes the value of the PKU screening test in the early detection and management of phenylketonuria. ■

InforMed proposal

BCBSM proposed to the state insurance commission the establishment of a network of physicians who will pay to have their practices compared with the practices of other physicians. InforMed, a private Baltimore company, would conduct these comparisons of charges and procedures and would collect data to help to keep health care costs in check.

As an incentive for physicians to participate, BCBSM would reimburse those who sign up with InforMed at a rate 5% higher than the reimbursement it pays other physicians. In order to finance the higher reimbursement, the insurer would increase fees at a cost of $2.5 million to subscribers. It predicts, however, a 10 million dollar savings as a result of the InforMed program.[5]

Insurance Commissioner John A. Donaho

In the closing days of the state legislative session, the Maryland Senate proposed amendments to a bill already passed by the House. The amendments, according to state Insurance Commissioner John A. Donaho, would have substantially weakened the bill that provided him with greater ability to oversee BCBSM. Mr. Donaho stated in a letter to newly appointed BCBSM president, William L. Jews, that if the Senate amended the bill, he would have no choice but to require BCBSM to maintain a surplus of $238 million (two months' worth of claims and operating expenses from the prior year). That requirement would drive the insurer into insolvency.[6]

On April 6, the Maryland Senate overruled the recommendation of its own Finance Committee by unanimously voting to require nonprofit insurers to reserve funds against unexpected claims or losses. Mr. Donaho stated that this action satisfied his greatest concern that BCBSM maintain an adequate surplus to avoid insolvency.[7]

On April 9, Governor Schaefer fired Insurance Commissioner Donaho. Sources in the governor's office indicated that the commissioner's efforts to gain more power to control BCBSM and his threat to drive the insurer into insolvency if legislators did not give him that power were factors in the governor's decision to remove Mr. Donaho from office.[8]

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Samuel Claggett Chew: Clinician and educator



Samuel Claggett Chew's portrait is displayed in Osler Hall, a bright beacon of our medical heritage. A unique and distinguished physician who is virtually unknown today, Dr. Chew ranks at the top of Maryland's medical scholars and respected practitioners. The canvas painted by Marie Deford Keller (**Figure 1**) was presented to the Faculty on November 20, 1914, just several weeks prior to Dr. Chew's death at age 71.

Dr. Chew's own words, spoken in 1896 in tribute of Dr. George W. Miltenberger, vividly typify Dr. Chew himself:

> No one among us so well as yourself illustrates and represents in his single person the various departments of medical teaching and practice. You are here Sir, an honored teacher among your pupils, a father among your children. At various periods in your long and versatile career you have taught your pupils anatomy, pathology, clinical surgery, clinical medicine, therapeutics and obstetrics. Out of the fullness of your own acquirements you have imported knowledge and out of the earnestness of your own zeal you have inspired enthusiasm.

Dr. Chew's portrait was presented by noted Baltimore physicians, Charles W. Mitchell and William S. Thayer. Epitomizing him as a physician, Dr. Mitchell commented that "the quietness, refinement and depth of his sympathy for the poor, and suffering, the gentleness of his voice, the clearness and precision of his conclusions as to diagnosis and prognosis and treatment" made an unforgettable impression on those who knew and studied with him.

Dr. William S. Thayer, a distinguished Johns Hopkins physician, described Dr. Chew as "modest, thorough and unassuming with exceptional good judgment founded upon his natural abilities and training.... An able diagnostician and a remarkable good physician and a teacher who exerted a wide influence upon his fellow man." Thayer also noted that Dr. Chew was a "truly superior man," one whose intellect not only made him a wise doctor, but allowed him to use his wisdom and his humanity to the greatest effect.

Throughout Dr. Chew's distinguished career, he made a number of pioneering contributions that significantly advanced medical practice principles. These virtually unheralded contributions place him among Baltimore's most skilled physicians along with Osler, Thayer, Longeope, Pincoff, Baetjer, Krause, Carey, and others.

Educated at Princeton, Chew took a medical apprenticeship with his father and graduated from the University of Maryland School of Medicine in 1858. He gained experience in several European centers, from medical practice in Baltimore, as chairperson of materia medica at Maryland (1864-1886), and as chairperson of medicine at Maryland (1886-1909). During his professional career, Chew performed no laboratory studies, but prepared numerous papers and reviews of important current therapeutic principles. He expressed in writing personal opinions gleaned from his vast experience with patients

and his perceptive analysis of the available literature.

The following "first" clinical vignettes display this unusual man's depth and innovative capability.

- In 1862, in a translation of an article by the distinguished French physician Lemaire, Chew agreed that tuberculosis was contagious from person to person. Neither Laennec, Louis, or Virchow held this opinion.[1]
- In 1867, Chew described a "bellows" type cardiac murmur heard just under the right shoulder in a 31-year-old sailor with tuberculosis. The murmur was described as systolic (synchronous with the first heart sound). It was present over the posterior surface of the right side of the thorax and best heard by Chew at the inferior angle of the right scapula. At autopsy, in addition to the tuberculous lesions in the right upper lobe, there were two hard masses about the size of hickory nuts, consisting of "calcarious" residuals of tubercles that pressed directly upon a branch of the right pulmonary artery. This, he astutely surmised, had caused an obstruction (impediment) to the free passage of blood, which accounted for the blowing murmur heard with the systole of the ventricles.[2] This is an example of excellent application of clinical skills and may rank Chew among the first to explain adventitious vascular sounds based on obstruction to blood flow.
- In a remarkable paper in 1867, Chew stressed the importance of auscultation, particularly of the heart. Although he did not use the term "inching," he clearly described the necessity to move the ear or the stethoscope from "below to upward and find the sound increasing in loudness and and harshness and finally attaining its greatest intensity at a certain point at the base of the organ."[3] Chew had described a typical case of aortic stenosis. Even today, "inching" is a very acceptable bedside maneuver.
- Chew regarded venesection (bloodletting) as grossly overused. In 1869, he published a paper outlining several of his defined indications for venesection including (1) relief of the abnormal manifestation of pulmonary congestion in heart failure; and (2) hypertension or hypervolemia (a term not then in use) for cerebral hemorrhage.[4]
- A particularly informative paper published in 1875 described digitalis as a cardiac tonic. "Dilatation of the left ventricle" was its most helpful indication, but "in cases of pure uncomplicated hypertrophy," digitalis was invariably injurious. Chew stressed the importance of auscultatory findings as a guide to therapy and pointed out that in mitral regurgitation, there was a favorable reaction to digitalis with a good prognosis.[5] We should keep in mind that these views were made before the advent of the sphygmomanometer, chest x-rays, the electrocardiogram (EKG), computerized axial tomography (CAT), magnetic resonance imaging (MRI), Doppler imaging, and clinical pharmacology.
- In Chew's day, thoracentesis was regarded as a questionable technique, generally to be avoided. In a series of papers published between 1873 and 1876, he

Med Chi Bicentennial Celebrations

Med Chi has already begun planning celebration activities for its bicentennial in 1999. If you have ideas or suggestions, please call Margaret Burri or Vivian Smith at 410-539-0872 or 1-800-492-1056.

described when the "surgical procedure" should be performed and the technique of aspiration. His three indications were (1) bilateral effusion; (2) unilateral effusion, which formed rapidly associated with other manifestations; and (3) when grossly purulent fluid (empyema) was suspected.[6] Chew thought that aspiration was not an extreme procedure and should be employed before it was too late. Like other physicians, he stressed the importance of a flat percussion note, as an important bedside aid, and considered it possible to distinguish between serous and exudative fluids such as empyema by degrees of flatness of the percussion impulse. As a corollary, Chew described how adhesions could be induced artificially between the parietal and visceral pleura to inhibit excessive fluid formation such as in empyema or broncho-pleural fistula. Ablative adhesions were caused by injection of a mixture of tincture of iodine and carbolic acid.[7]

Dr. Chew's contributions were not limited to medical teaching and writing. From 1874 to 1875 and again from 1877 to 1878, Dr. Chew was vice president of the Medical and Chirurgical Faculty of Maryland, and in 1879-1880 and 1898-1899 (centennial year), its president.

The life and mark of physicians like Samuel Claggett Chew is to the practice of medicine what the blossom of the tree is to its fruit; it gives it the most delightful aroma and taste. It helps us appreciate how such gifted persons with ability and curiosity overcame so many obstacles. We improve ourselves by simply contemplating the scope and quality of all that they accomplished.

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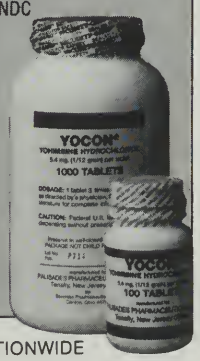
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Imaging Case of the Month

A 52-year-old white woman was referred for evaluation of a 1.5 cm palpable nodule in the 11 o'clock position of the left breast. The mass was mobile and was not associated with tenderness. Attempted aspiration by the patient's physician did not yield fluid. The patient had no significant family history of breast carcinoma and no history of prior breast surgery.

Craniocaudal and oblique mammographic views of the left breast were performed **(Figures 1 and 2)**, as well as a spot compression magnification view of the mass (not shown).

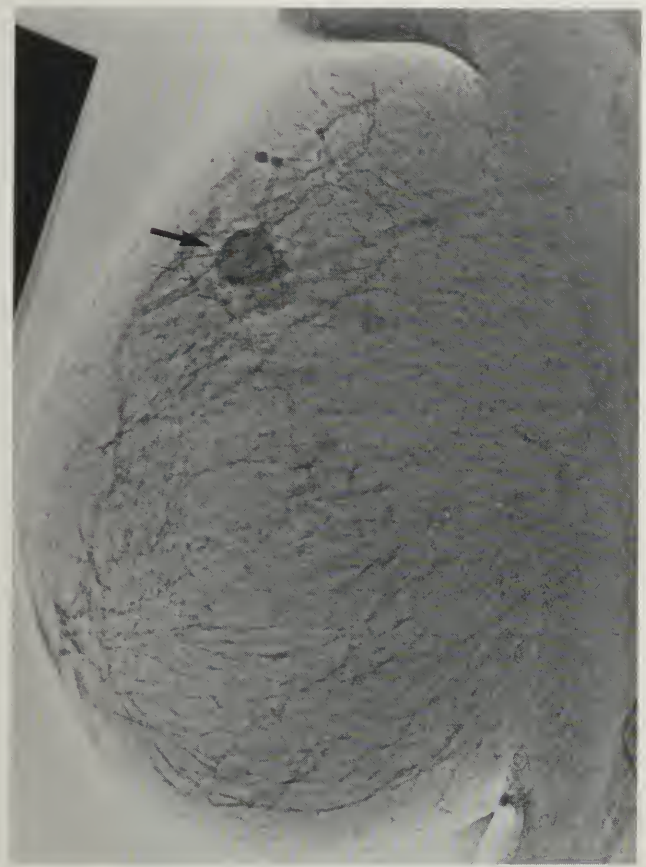


Figure 1.



Figure 2.

Breast carcinoma with halo sign

Figure 1. Oblique mammographic view of the left breast demonstrates a 1.5 cm smoothly marginated oval mass in the upper aspect of the breast. This is surrounded along its anterior aspect by a curvilinear radiolucent zone (arrow). The posterior margin of the mass is partially obscured by the surrounding breast tissue.

Figure 2. Craniocaudal mammographic view of the left breast (cropped) shows the mass in the slightly medial aspect of the breast. In this image, the mass is almost completely surrounded by a radiolucent zone, also described as the halo sign (straight arrow).

This patient presented with a 1.5 cm solid palpable mass in the 11 o'clock position of the left breast. The presence of a partial or nearly complete halo or radiolucent band surrounding a mass, as seen in this case, has long been considered a mammographic sign of benignity.[1,2] Pathologic evaluation of this mass, however, revealed an infiltrating ductal carcinoma.

The halo sign has alternatively been described as a categorical sign of a benign process or a strong secondary sign of benignity. Unfortunately, major exceptions to this rule exist. In a study performed in the Breast Imaging Section of the Department of Radiology of the Massachusetts General Hospital from January 1978 to July 1986, 18 women with malignant breast masses demonstrating a partial or complete halo sign were identified. Of these malignant lesions, 10 represented infiltrating ductal carcinoma; 4 represented lymphoma of the breast; and there was 1 each of breast cancer metastatic to an intramammary lymph node, cystosarcoma phylloides, malignant fibrous histiocytoma, and metastatic melanoma.[3]

It has previously been postulated that the halo sign represents compressed fat surrounding a lesion. Densitometry, however, does not demonstrate a density change across this zone. It is more likely that the lucent zone represents an optical illusion caused by a macroscopic smooth border that changes abruptly in density peripherally. This phenomenon is called the Mach effect.[4]

Regardless of etiology of the halo sign, it is clear that while it is frequently identified in benign lesions such as cysts and fibroadenomas, it cannot be considered pathognomonic for these entities. Nor can it be considered a sign of a noninfiltrating malignant process, as over half of the malignant masses exhibiting a halo sign in the Massachusetts General Hospital study were infiltrating ductal carcinomas. Caution must be used in the evaluation of all solid breast masses, and malignant etiologies must be considered even in the presence of the halo sign.

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Editor ■

PHYSICIAN AUTHORS WANTED

"Imaging Case of the Month" is a regular feature of the *Maryland Medical Journal.* Coordinated by the Maryland Radiological Society, the cases presented provide a review of a broad range of diseases and pathological processes of interest to a wide range of specialists.

Physicians interested in submitting cases for publication consideration should contact the department editor:

Edgar C. Fearnow, M.D. • c/o Drs. Schultze, Snider & Assoc., P.A. • Suite 100
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Book Reviews

William Henry Welch. Simon Flexner and James Thomas Flexner. Baltimore: Johns Hopkins University Press. 1993. 572 pages. $29.95

Don't be put off by the formal-sounding title and joint scholarly authorship. This book is a good read.

Originally published by the Viking Press in 1941, it is now re-issued by the Johns Hopkins University Press with a foreword by Thomas Turner.

It is basically the background of modern medicine in the United States. It explains the curriculum that physicians encountered in medical school. Most importantly, this 50-year-old gem does it with style.

The content is just as advertised—the story of a heroic figure and of an era. Dr. Welch lived in an age of heroes. He captured the public admiration just as a Jack Dempsey or a Babe Ruth, and his fame lasted for more than 15 minutes. His impact on medical thought and educational method has lasted for a long time. The age of his life span, 1850-1934, was one of tremendous growth and change for everyone.



The Four Doctors (Welch, Halsted, Osler, and Kelly) by John Singer Sargeant.

William Welch grew up in Litchfield County, Connecticut, in a family where his father and many male relatives had practiced medicine. But it was not a story of royal succession. William's mother died when he was six and his father remarried when William was in his mid-teens, but was always wedded to his practice. How do early loss, frequent solitude, and loneliness figure in a life of great accomplishment? Read the book.

While you learn about young Billy, you can view the state-of-the-art by a glimpse of his father's (William Wickham Welch) practice:

> However, like most country practitioners of the time, Dr. Welch mingled traditional medicine with the scientific. He kept a ledger in which he recorded under the name of the disease, remedies which other local physicians believed efficacious; he would note in the margin that it was the favorite prescription of Dr. So-and-so. Sometimes his "cures" seem bizarre to modern eyes. He was, for instance, particularly proud of his remedy for snake-bite: copper filings cut from a penny, dissolved in vinegar, and immediately applied to the wound. Of course the chemical thus produced, copper acetate, had no effect whatsoever, but the rattlesnakes of Connecticut are fortunately so small that they rarely give a fatal bite; William Wickham was able to boast that he had "never lost a case."
>
> As was again typical of his period, Dr. Welch believed in drugging; George T. Johnson, the local pharmacist, says of his prescriptions: "I remember some that he wrote which had in them everything that he knew the name of." Elder citizens of Norfolk would call for a bowl and mix medicine in it, seeking to get the right proportions by tasting the concoction as he went along.
>
> William Wickham, however, believed in the virtues of fresh air, which many of his colleagues regarded as a deadly poison for fever sufferers. The story is told that on passing the house of a patient late one night, he saw that the windows were, contrary to his instructions, all shut. He reined in his horse and tore the window of the sick-room from the house, frame and all. Placing it in his buggy beside him, he drove on, confident that his patient would no longer disobey his order.

After classical studies at Yale, William developed a late calling for science and medicine. From Columbia he went to Germany, then returned to New York City before being recruited by Hopkins in 1885.

> At 35, Welch had found himself a place in the world that was perfect to his needs and desires. For many years a genie confined in a bottle, he rose up, once the cork was pulled, into his true dimensions, and for almost 50 years he was to tower over American medicine, determining, creating, helping change a backward profession into a leading profession of his time. Moving in a highly

> controversial field toward revolutionary ends, he was always gentle, never raising his voice above the tone of ordinary talk. He won campaign after campaign but never fought a battle; haste was unknown to him, or anger or the exuberant joy of putting an opponent down. He was to win affection and admiration until he became, first to his associates and then to younger scientists everywhere, in common parlance the beloved "Popsy."

There was a perfect "fit." A lifelong bachelor, he had vision, drive, and perseverance. The Hopkins plan became the model for United States and worldwide medical training. He went back to New York, traveled all over, and was a consultant in China. He often walked the neighborhood, usually smoked cigars, and was fond of word games. As he was a public figure in later years, he hobnobbed with the rich and famous. By the time he retired in 1931, there were still no effective antibiotics, but the practice of his father's era had disappeared, and medical education was organized around scientific observations as it still is today.

The book contains an appendix and an index, but the text is refreshingly nonstuffy. Welch knew how to organize, teach, and persuade. The Flexners knew how to chronicle.

The dust jacket has a glossy print of John Singer Sargent's *The Four Doctors* (Welch, Halsted, Osler, and Kelly) on the front, but just to reassure you, there's a bar code on the back. No doubt that today's biographer might include more conflict, perhaps a small scandal. However, this is a well-written biography. Anyone who has been to medical school will find it fascinating.

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■ ■ ■

Medical Malpractice: Handling Emergency Medicine Cases. Gervase M. Flick. Colorado Springs, Colorado: Shepard's/McGraw-Hill. 1991. $95.00

The most impressive thing about *Medical Malpractice: Handling Emergency Medicine Cases* is the number of times the name of the author/editor appears with some or all of its qualifiers. "Gervase M. Flick, M.A., M.D., J.D., M.P.H., F.C.L.M., D.B.L.M., charter member, American College of Emergency Physicians" appears no less than 123 times in 736 pages of text. After reading each of them, one marvels at the simple "G.M. Flick" acknowledgment that appears on the cover of the volume.

The next surprise to me was that, despite the subtitle, "Handling Emergency Medicine Cases," the first chapter to specifically relate to that topic was chapter 31 (out of a total of 40). The first 30 chapters, although interesting reading, constitute an historical overview of the specialty of emergency medicine as seen through the eyes of an urgent care center practitioner who considered himself to be practicing emergency medicine when an intern at Burbank Community Hospital in 1960. That he has not been certified in emergency medicine (EM) is obvious through the glaring omission from his string of credentials of any (such as D.A.B.E.M. or F.A.C.E.P.) that would qualify him as a specialist in the field.

The third was the incredibly poor literary style of the principal author, noticeable as early as the preface through sentences such as "Legal pioneers have also played an important role in the conceptual development and the ensuing changes of what entails emergency medicine and how it should be practiced for the benefit of all." Flick's style was so egregious that I could immediately tell which parts of each chapter were written by him, and which written by others and only "edited" by Flick. His poetic license expired in Section 1.01 with these lines: "They [emergency physicians (EPs)] were a new group of physicians who had felt the adrenalin high of confidently facing the wide variety of complex, acute problems that they repeatedly treated in the emergency rooms of this nation. Their theme song became the melody in the Doppler effect of the passing ambulance siren."

The inclusion of amazingly simplistic statements of Flick's own, such as "attorneys, by way of instituting lawsuits for medical negligence, have come to fill this vacuum which physicians have created.... I can stipulate that one of the greatest single causes of medical malpractice suits in the United States is medical malpractice," and "a thorough record is a well-documented record," or by misfortune plucked from the presentations of others. "According to Bernard Hirsch, M.D.... at least 10% of all physicians do not keep thorough records and at least 20% of all physicians could stand some improvement in their recordkeeping efforts," to which Flick adds gratuitously, "After reviewing hundreds of records by other physicians, it is this author's impression as a physician-attorney that these estimates of the number of poor record-keepers are probably on the conservative side."

This first made me question the intellectual level of audience the author was targeting. Not physicians, I decided at this point, and certainly not emergency physicians. ("As a group, physicians probably have some of the biggest egos in the world, and emergency physicians probably have the biggest within the medical profession.") Yet the level of legal advice he gave was so elementary as to be insulting to attorneys (and to most physicians, for that matter). For example, "To [read emergency electrocardiograms and x-rays done on inpatients at night] is to ask for medical/legal problems." So who was he writing for, I kept asking myself, the press? His family? (His father, G.C. Flick, D.O., former Jesuit priest and ethical prophet of the profession?)

Clearly, Flick was on a soapbox about several issues. His extensive coverage of rules relating to board certification in EM and fellowship in the American College of Emergency Physicians (ACEP) left the unmistakable impression that he has a bone to pick with one or both accrediting bodies. "Board members [' conservative attitudes] cause them to change the requirements for board certification [such that the] board members themselves would no longer be eligible...if they had to apply.... Perhaps psychologists should study this phenomenon whereby specialty medical board examiners make the eligibility requirements continually tougher for new candidates." "For reasons of its own, [the American Board of Emergency Medicine] ABEM does not like to have candidates using the board eligible designation, even when the physicians are fully board eligible.... The resignation rate [from ACEP] has been due to a variety of reasons [such as that] some physicians no longer find the ACEP's high dues, large staff, and multimillion dollar budget relevant to the practice of emergency medicine at their particular hospital or freestanding urgent care center." Although feelings about such matters are important, I questioned the purpose of including them here (unless, of course, they were the reason the book was written).

As a member of the ACEP Wellbeing Committee, I was glad to find a chapter on stress and attrition within the specialty (although I had to wonder what it was doing in a volume of a series seemingly aimed at attorneys). Flick mentioned several aspects of this problem that I have not seen previously published (but which could universally be acknowledged), such as "Some staff members...will keep trying to put their responsibilities back on the shoulders of the emergency department physician. They may take unbelievable liability risks for themselves and others to save themselves from an unscheduled night trip back to the hospital. EPs who allow staff physicians to do this may end up as codefendants in court." But his conclusion, that "Emergency medicine is not a specialty for the faint of heart, the weak of mind, or the frail of body," did not add anything to the understanding of the problem, and probably could have stood alone in place of the chapter.

Some of Flick's risk management advice is impractical or ridiculous, such as his assertion that an **incident sheet** concerning incorrect notations recorded in the ambulance records (which he acknowledges may not even be written when the ambulance arrives and critical emergency department care begins) **must** be filled out and signed by the physician and the nurse before their shifts are completed; or the implication that failure to seek previous records from all possible sources (although not standard of care at this time, may be) negligent under critical circumstances.

Several of the pronouncements he makes are overstatements. ("When physicians let days go by before finishing particular emergency facility records, this frequently constitutes medical malpractice.") Some of the advice he has lifted from other sources and stated as if axiomatic, are matters of opinion ("If any vital signs are abnormal, of course, this must be pointed out to the patient") or obvious ("Discharging patients with substantially abnormal vital signs can cause problems when you need to defend the quality of care"). And some of his "pearls," such as always to suspect fast pulse rates which are prime numbers, seem totally out of place in such a volume. His entire chapter on incident reports is so full of imperatives and advice that it is difficult if not impossible to follow (such as filling out an incident report before the work shift begins...), and the chapter is probably best skipped.

Flick makes some interesting observations that are presented as if revelational: "It is the opinion of this author that wrongful deaths because of medical negligence are accidents," and he chastises plaintiffs' attorneys for failing to file for double-indemnity remuneration from insurance policies. "The most obvious litigation-prone professional group is attorneys, their immediate families and close relatives" but also, he admits, those who are accident-prone, drug abusers, alcoholics who continue to drink, those dissatisfied with their jobs, marriages, or their lives in general, and of course physicians' families (though not physicians themselves). Surely such stereotyping alienates plaintiffs' attorneys (who are thus portrayed as pandering to misfits) almost as much as his assertion that "when lawyer ignorance combines with lawyer arrogance and attorneys fail to investigate fully possible medical negligence which is brought to their attention by injured clients..." results in exhaustion and frustration on the part of poor patients who become plaintiffs.

Flick alienates and confuses physician readers when he quotes and juxtaposes random bits of conflicting clinical advice. "A lumbar puncture is mandatory to establish a definitive diagnosis of meningitis," however, "a lumbar puncture should be carefully considered on a case-by-case basis before routinely ordered in cases of suspected meningitis," with his own medicolegal advice, to wit: "If a lumbar puncture is not done in any case of possible meningitis, the emergency record should reflect the history and the physical findings that would support such a decision. The patient's medical record should be written in a manner that would be convincing to a jury should there be litigation over the issue years later." He alienates attorney readers when he speculates that "Some attorneys have an ego problem prohibiting them from giving serious consideration to any trial advice offered by physicians." He even alienates patients (which we all are, eventually) with advice such as "This (approach to telephone consultation) may not be good

hospital politics, but it is good medicine, and it may save both physicians more than just a few days in court." He adds, as if an afterthought, "It may also save the patient's life."

To his credit, Flick does make one point that may be of use to emergency physicians who are struggling with hospital administrations over departmental status. Clinical privileges to perform procedures are normally granted to the practitioner by the clinical department, subject to approval by the medical staff. This being the case, it is hard to argue that, for example, chiefs of departments of surgery, themselves not credentialed to perform certain ED procedures such as pacemaker insertion or precipitous delivery, should be entitled to make such privilege decisions with respect to emergency physician applicants.

Several of the chapters contributed by others, notably those on transport and transfer and preparation of EM cases, by attorney William Reisbick, and on expert testimony, by emergency physician Samuel Coleridge, are well written and useful to physicians or attorneys involved in cases. But ulterior motives peek through—such as the assertion in an M.D./J.D.–written chapter that in some cases, "plaintiffs' attorneys should have physicians/attorneys in the courtroom, and that failure to do so...may result in a legal malpractice claim."

A number of internal inconsistencies between contributors, misspelled words, misnamed institutions (such as Johns Hopkins Memorial Hospital), and mistaken credentials kept me reading the book for all the wrong reasons. But overall, I believe the book suffers most from its lack of reader definition—too simplistic legally for attorneys, and too simplistic clinically for physicians—to be of much value to either group.

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■ ■ ■

Immunology of Pregnancy and Cancer. Valentin I. Govallo. Commack, New York: Nova Science Publishers, Inc. 1993. 310 pages. $79.00

The treatment of cancer using a placental extract is this book's raison d'etre. Much material only slightly relevant to the fundamental theme is presented, however, and the sheer volume of words might prevent some readers from pursuing reading until the stimulating portion about a novel, cancer-treatment therapy is reached.

To justify his claims, Govallo thoroughly reviews the human immune system, which is responsible for homeostasis maintenance. This complex entity, controlling the organism's qualitative stability protects from foreign and emerging modified cells; eliminates deficient and injured cells; and neutralizes and eliminates unfamiliar high-molecular-weight compounds of biological origin.

Govallo reaches toward a cancer control theory envisioning normal pregnancy as a prime example of immunologic control. He believes the key issue in pregnancy maintenance is the blocking and resulting loss of action of the maternal immune system toward the foreign proteins of the fetus. The placenta provides the inhibitory products, creating a shield, and their lack may lead to spontaneous abortion. In addition, some antibodies may enter the bloodstream to inhibit T lymphocyte effect or functions and interleukin-2 production. Cell-mediated immune response is demonstrated by para-uterine lymph node enlargement in early pregnancy and lymphokine production. The fertilized ovum also produces an immunosuppressory factor that inhibits T cell activity. Nonfertilizing spermatozoa and semen plasma components provide further factors to block lymphocytic response to blastocyte antigens. The uterine endothelium is infiltrated by suppressor cells whose soluble products inhibit interleukin synthesis that activates normal killer cells and cytotoxic T-effectors.

Besides its trophic functions, the placenta's decidual membrane has an important immunoregulatory function. The placenta is simultaneously a passive anatomic filter between mother and fetus and an active barrier that uses antigenic structures and liberated remote immunoregulators to control immunological reactions. If immunosuppressive substances, such as hormones, antigens, and lymphokines, are not provided by the placenta, the embryo may be attacked by the maternal immune system and recurrent spontaneous abortion witnessed.

Vaccination by two methods was tried to save these pregnancies: skin grafting and lymphocyte injection. The initial patient had had 15 successive miscarriages. Small skin grafts were exchanged between husband and wife. The husband lost his graft in 10-12 days, but the wife's survived for more than eight weeks. A child was subsequently delivered by cesarean section. In 12 additional cases treated in the same manner, eight mothers delivered normal babies with good weights, although four miscarriages occurred in the 20-22 week. The failures suggested that repeated alloimmunization might be necessary. Results materially improved when paternal lymphocytes replaced skin as an antigen. In 606 mothers treated with lymphocytes for this disorder, 91.3% delivered live babies.

With the analogy between fetus and malignancy in mind, Govallo thought he might influence the shield cast about a cancer by itself, which protects it from host immune attack. If the barrier could be made penetrable to the action of the host immune system, tumor growth might be influenced.

These thoughts stimulated use of a complex form of immunotherapy revolving around the injection of lymphocytes obtained in various ways, immunization with embryonic tissues, and injection of

bacillus Calmette-Guerin vaccine. Tumor growth, inhibition or regression, however, was not substantially achieved by these methods. This stimulating type of immunotherapy was used in 66 patients with assorted malignancies: eight survived up to 3 years; four up to 5 years; and two for 10 years or more. The five-year survival rate, an accepted criterion for judging results, was 6% (4 of 66).

This embryonic tissue experimentation convinced Govallo that it was possible to influence resistance to tumor growth. Deblocking therapy aimed at removal of this endogenous protection was then conceived. Chorionic villi extract was injected into the patient. It was hoped this would evoke an antibody response and alter the shield to permit attack by the host immune system (**Figure 1**). In 35 patients receiving immunoembryo-therapy, 31 survived up to 3 years; 27 up to 5 years; and 17 for 10 or more years. The five-year survival rate was 77%, a considerable improvement over immunotherapy.

Govallo lays great store in using a lymphocytogram to detect immune changes prior to evidence of clinical symptoms. In the normal patient, about 90% of the lymphocytes do not exceed 8 μm in diameter, with the rest being larger. Three basic divisions may be made: small (up to 7.5 μm); medium (8-13 μm); and large (14-20 μm). Corresponding normal percentages are 21-28; 61-72; and 5-10. Tumor patients in terminal disease stages have a decreased number of small, and an increased count of large, lymphocytes. After therapy, these cellular parameters return to normal.

The lymphocytogram does not depend on the cancer's histological type or location. Changes were not observed in benign tumors, or in inflammatory, degenerative, or metabolic disease. Interestingly, a prolonged delayed return to normal was witnessed when malignant tumors were successfully removed.

Many aspects of this novel treatment require validation to substantiate the author's claim. Just as loss of small lymphocytes from the blood stream may be used as a diagnostic tool, the return of these cells in normal numbers after therapy would indicate that the desired result was being obtained.

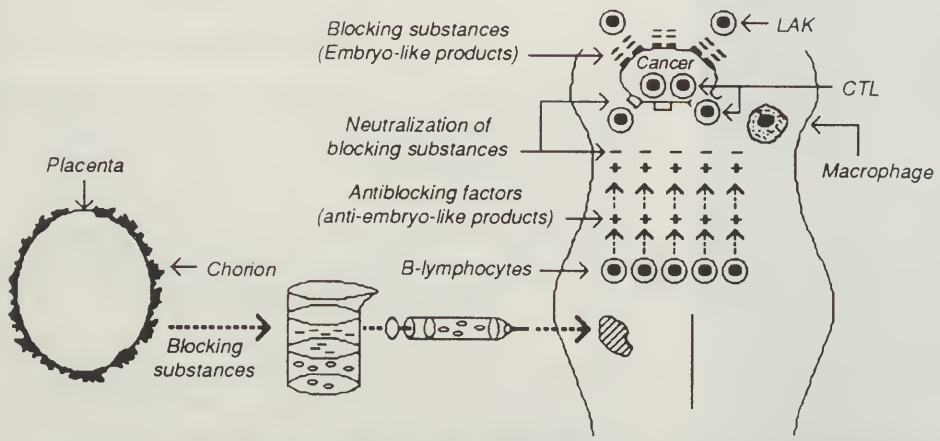


Figure 1. Hypothetical scheme demonstrating antiblocking activity of placental extract in patients with cancer. CTL = cytotoxic T lymphocytes. LAK = lymphokine activated cells.
(Figure 1 is reproduced through the courtesy of Nova Science Publishers, Inc.)

This book does not permit rapid reading because frequent pauses for digestion of the material must be made. The small number of cancer patients and the lack of detail regarding them are debits. A statistician would also point to an absence of controls, although the patients treated before the use of chorionic villi extract was started may serve as such. The theory regarding a tumor as an embryo is unique. The immunologic basis for pregnancy maintenance seems sound, and transfer of this knowledge to cancer therapy seems plausible. Further experience is mandatory to prove beneficial results from chorionic therapy. If the results are accurate, this innovative approach could be one of the greater discoveries of the twentieth century. The book should be read with hopeful anticipation and not accepted as dogma.

The author, the director of the Laboratory of Immunology in Moscow, has been interested in the field for over 30 years and has been treating advanced cancer patients with placental extract for about 16 years. He is well recognized in Russia through the publication of scientific articles. This translation of his life work is the initial major presentation of immunology in cancer and its related therapy in this country.

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COMING OUT OF THE DARK

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Physician Rehabilitation Committee

1953:
Stalin died.
DHEW was born.
Oveta Culp Hobby spoke to the AMA convention in New York City. She warned organized medicine to find solutions for the socioeconomic problems facing the medical profession or the solution would be taken away from doctors.

Below is a clinical pathological conference discussing a case that might be managed more successfully today. As you read, consider what the least expensive, most efficient care might be if this were your patient in 1993.

*Clinical Pathological Conference**

Reprinted from the *Maryland State Medical Journal* 1953; 2(4): 189--200.

Clinical history #593,713. F.A.J. Married. White. Male. Age 43. Admitted: December 24, 1951. Died: Dec. 27, 1951.

Complaint. Shortness of breath over a period of two weeks.

Family history. Unimportant.

Past history. Typhoid fever at the age of 23 years; scarlet fever one year before admission, otherwise he had enjoyed good health. As a civil service worker he had had frequent physical examinations including chest x-rays. So far as he knows, never had any elevation of the blood pressure. Always rather heavy, about 220 pounds, but during the year before the present illness had reduced his food intake and had brought his weight down to about 185 pounds.

Present illness. In retrospect, the patient thought that probably for 5 or 10 years prior to the present illness, he had noticed increasing dyspnea after vigorous exercise. About four months prior to his admission he had become quite dyspneic on the slightest exertion and this lasted one or two hours. It passed off uneventfully and did not recur. Two weeks before admission, he developed a cold and some cough productive of small amounts of clear sputum, and with the

* *Presented at the Annual Meeting of the Medical and Chirurgical Faculty on April 30, 1952, by the Johns Hopkins University, School of Medicine (Transactions 1952).*

cough he developed increasing dyspnea, so that he would become short of breath with as little exertion as walking the distance of one block on the level. He never had expectorated blood and had no pain in his chest. He could sleep lying down and was never dyspneic at rest. Three days before admission, he awakened to find that rather suddenly he was much more short of breath as compared with the proceeding day; in fact he was too short of breath to answer questions or talk, and he found it difficult to dress himself. For the first time, he became conscious of palpitation associated with his dyspnea, but denied the presence of any chest pain or substernal pain or oppression. He saw his physician who found his temperature to be 97°, noted the dyspnea, and found his blood pressure to be 130/110. Patient was admitted to a local hospital. There was no cyanosis, but the neck veins were distended. An x-ray of the chest was made that showed "infiltration extending out and up from the left hilum." He was given penicillin. The next day he was somewhat cyanotic, and the pulse was accelerated, the rate being 120. He was given nasal oxygen and put on digitalis, but without any improvement. He was brought to Baltimore and admitted on the surgical service of the Johns Hopkins Hospital, with the provisional diagnosis of a mediastinal mass. Six hours later, he was transferred to the medical service. He had had no pain, no edema, no chills or fever, and the only difficulty of which he complained was the dyspnea.

Physical examination. Temperature 101°. Pulse 100. Respiration 20. Blood pressure 101/80 equal in the two arms.

The patient is described as a heavy set and large-chested man, lying flat in bed, breathing rapidly. Sitting up produced no decrease in his respiratory rate; he would have to stop in the middle of a sentence to catch his breath. The face was ruddy. There was no glandular enlargement except for some small cervical nodes. The pupils reacted actively to light and during accommodation. The extraocular movements were normal. The fundi were described as normal. There was a slight nasal discharge but no obstruction. The pharynx was considered normal. The neck was supple. The trachea in the midline; no venous distension in the neck was noted. The chest was large with some increase in the anteroposterior diameter, but the lungs were clear to percussion and auscultation. The diaphragms moved well, and there were no adventitious sounds heard. The left border of the heart extended to the midclavicular line. There were no shocks or thrills. The heart sounds are described as distant and of only fair quality. The second aortic sound was louder than the second pulmonic and along the left sternal border, in the fourth interspace, there was a split second sound, the second component of which suggested an early diastolic murmur to the examiner, but only in certain phases of respiration. This was not definite and no other murmurs were heard. The liver edge percussed to the costal margin. There was no abdominal tenderness or mass. The spleen was not felt. The genitalia showed nothing abnormal. A rectal examination was not made. There was no clubbing of the fingers. There was no cyanosis, and no edema of the extremities. There were good pulsations in the vessels of the feet, and the reflexes were normal. There was no motor or sensory disturbance.

Course in hospital. The patient was put at complete bed rest and given oxygen by catheter. The following day, he seemed somewhat less short of breath, but he still would become dyspneic on talking. The venous pressure was 130 mm of water and the circulation time, arm to tongue with decholin (dehydrocholic acid), 30 seconds. The blood pressure was lower, having fallen to 90/60. The following day, the patient, rather suddenly, became much more short of breath and his blood pressure was 88/70. At that time, the venous pressure was 150 mm of water, and the circulation time had increased to 75 seconds. The lungs remained clear on physical examination but the gallop rhythm had become more pronounced. His cough tended to increase, and he complained of some substernal irritation which was thought to be aggravated by coughing, and he also complained of lower abdominal pain, but nothing further could be found on physical examination. Later that day, he vomited. This greatly increased his shortness of breath and caused a recurrence of his abdominal pain. The splitting of the second pulmonic sound seemed more pronounced. The pulse rate was 120; respiration was labored at a rate of 28. The lungs still remained clear. The abdomen was soft, there was no spasm or rigidity, but still some tenderness in the left lower quadrant but no rebound tenderness. Oxygen, which had been administered by catheter, then was changed to a tent. This made him much more comfortable. The possibility of a pneumonia was considered, and antibiotic therapy was instituted with Aureomycin (crystalline chlortetracycline hydrochloride). He also was given digitalis. His condition grew progressively worse, the shortness of breath increased and he was increasingly cyanotic. The heart was still not enlarged, but the sounds now were considered of mushy quality and further comment is made of the existence of the protodiastolic gallop. The liver was thought to be somewhat enlarged, and the veins of the neck became distended. Still the lungs remained entirely clear on physical examination. There was no edema of the lower extremities but the note is made that the right calf was 1.5 cm larger in circumference than the left, but there was no tenderness. His condition grew steadily worse; his blood pressure was unobtainable, and he became

very excited. This increased his dyspnea and terminated only when he collapsed, and death followed in about five minutes.

On admission, the temperature was 99° by rectum; in four hours it had reached 101°, and it varied between 100° and 101° for the next 48 hours when it reached a maximum of 102°, falling rapidly before death.

Laboratory data.

- *December 24, 1951.* Blood: Hemat, 49. SR, 10. WBC, 13,000. PMN, 64%. Lymph, 30%. Mono, 6%. Smear shows no abnormal cells and platelets are adequate.
- *December 24, 1951.* Urine: Sp Gr, 1.015. Acid: Sugar, 0. Alb, trace. Occasional white cells, no casts.
- *December 25, 1951.* STS, negative.
- *December 25, 1951.* Blood culture, negative.
- *December 26, 1951.* Blood chemistry: NPN, 45 mgm%. Sugar, 92 mgm%. T Prot, 6.9 gm%. Alb, 4.2 gm%. Glob, 2.7 gm%.
- *December 27, 1951.* NPN, 54 mgm%. Sugar, 132 mgm%. CO_2, 22.1 m/eq. Chlor, 101 m/eq. Potas, 5 m/eq.

Electrocardiograms.

- *December 24, 1951.* Rate, 94. P-R interval, 0.19 sec. Rhythm, S-A. P waves, normal. QRS complexes: Tiny, variable Q3. Maximum deflection in limb leads (5.5 mm in Lead 1). T waves: Inversion T3, V1 and 3. ST segments, normal. QT interval, 0.38. R-R, 0.66 (prolonged). Interpretation: QRS amplitude at lower limits of normal. Q-T interval prolonged. Digitalis "effect."
- *December 25, 1951.* Since the record of December 24, 1951, the Q3 has disappeared. QRS amplitude is still at the lower limits of normal. Q-T interval, 0.44. R-R, 0.76 (prolonged).
- *December 27, 1951.* Rate, 94. P-R interval, 0.16 sec. Rhythm, S-A. P waves, normal. QRS complexes: Low voltage in limb leads. Delayed precordial transition. Vertical axis T waves: Sagging ST 3 and V1 with inverted T waves. T2 low, upright. Q-T interval, 0.40. R-R, 0.68 (slightly prolonged). Interpretation: Low voltage in limb leads. Prolonged Q-T interval. Abnormal T waves.

X-ray, outside film

- *December 22, 1951.* A chest film taken this date at St. Mary's Hospital, Leonardtown, Maryland (two days before films at this hospital were taken) also reveals an infiltration extending from the hilum into the upper lobe on the left. The film is light, making it difficult to see much difference between the two sides on this particular film. The findings are essentially those as reported here on December 24 and 25, 1951.

X-rays.

- *December 24, 1951.* Chest: There is an irregular infiltration in the left lung field near the hilum apparently localized in the apical segment of the lower lobe. The lung fields otherwise are clear. The heart and great vessels are within normal limits. The etiology is suspected to be of virus pneumonia, although a neoplastic process cannot be excluded.
- *December 25, 1951.* Chest: There has been some resolution of the infiltrative process in the left lung as compared with the previous films of the day before, although this still does not exclude a tumor, it gives more support to the impression of pneumonia.

Summary

Dr. Wainwright. We'll have the x-ray, please. This film of the chest shows the shadow coming out from the hilum on the left side **(Figure 1)**.

Now then, in summary, we have a 43-year-old white man, who, for several years, was becoming increasingly short of breath, and four months prior to admission experienced a short, rather acute attack of dyspnea which passed off



Figure 1. This x-ray shows the shadow coming out from the hilum on the left side.

uneventfully. Two weeks before admission, he developed an upper respiratory infection which greatly aggravated his dyspnea but did not provoke cough, hemoptysis, or pain. He was singularly free from orthopnea. The day before admission, he was awakened by extreme dyspnea and was now aware of palpitation. His physician found him short of breath with distended neck veins but not cyanotic, with a high diastolic pressure and a small pulse pressure. The only cyanosis commented upon was on the next day, and it evidently was not profound; and at this time, the infiltration that you have seen in the x-ray was described.

Thus far he had no fever, but on admission to the hospital in Baltimore his temperature was found to be 101°, and his blood pressure had fallen to a much lower level. His dyspnea was extreme, but there was no orthopnea and no cyanosis. The veins of the neck were not distended. Although the chest was large, it was not emphysematous, and on physical examination was found to be entirely clear. The heart was not enlarged, the sounds distant and of poor quality, a gallop rhythm was heard, there were no murmurs, and the second pulmonic sound was not accentuated. The liver was not enlarged, and there was no edema.

The patient's course in the hospital was a stormy one, he lived but three days after admission, and had fever with a slight leukocytosis all the while. He continued to be dyspneic, but was not cyanotic. His venous pressure was only slightly elevated, but the circulation time was quite prolonged and materially increased while the blood pressure remained low. The lungs remained clear on physical examination, even though the respiratory rate and the pulse rate increased, and his respiration became more labored. The gallop rhythm persisted and became more pronounced, and the heart sounds became of increasingly poor quality and are described as "mushy." He developed lower left quadrant pain which persisted, but nothing beyond some localized tenderness was found. As he rapidly became worse, congestive failure developed and he died.

The laboratory data accumulated showed little that was of aid in the diagnosis. The x-ray of the chest showed a shadow in the left lung field, which you have seen. The electrocardiographic studies showed variations from normal and appeared to be more than the digitalis he had received could account for. There was a tendency to right axis deviation, although this was by no means distinctive. The changes were not specific, but would appear to indicate that his heart was laboring under great strain.

Discussion

Dr. Wainwright. In the discussion of this case we must consider the problem in three ways. (1) Was there anything within the mediastinum but without the heart or lungs which caused this difficulty? (2) Was the cause of his trouble primarily pulmonary? (3) Was the condition that produced his symptoms and caused his death cardiac?

With regard to the first question, the only condition that might be considered is a mediastinal tumor. The possibility of this is suggested in the appearance of the chest by x-ray, and to the roentgenologist, the shadow coming out of the left hilum was capable of this interpretation. To suggest it, however, is to dismiss it, for the history is much too long; and to have experienced such a degree of dyspnea from a mediastinal tumor, there surely would have been obstruction of the trachea with stridor and most surely other evidence of a space-occupying mass.

The decision as to whether his condition was pulmonary or cardiac is more complicated, and one must consider both chronic and acute lung conditions in seeking a pulmonary origin for his symptoms and signs. Of the chronic pulmonary conditions, emphysema with its accompanying chronic basal infection and interstitial fibrosis of the lung would merit consideration.

Although the patient had had increasing dyspnea for four or five years, it was not the story of emphysema and chronic bronchitis, and exacerbations with each recurring respiratory infection. His chest is described as being one with increased anteroposterior diameter, but it was not found emphysematous by x-ray. Cough and sputum were conspicuously absent, and whereas the lack of orthopnea would suggest that his dyspnea was pulmonary in origin, the results of increasing obstruction to the pulmonary circulation were not present. There was no accentuation of the second pulmonic sound, no chronic cor pulmonale, or a failing right heart. There was only dyspnea on exertion without cyanosis, with his capacity for activity steadily decreasing.

Interstitial fibrosis of the lung was described originally by Hamman and Rich as acute and was a diffuse thickening of the alveolar structure, producing obstruction to the pulmonary circulation. The course was often a matter of weeks or months, but was acute as such diffuse pulmonary disease goes. The pulmonary phase of the condition was dominated by dyspnea and cyanosis, but often the patient was not seen until heart failure had developed, and frequently the underlying pulmo-

nary difficulty was not appreciated, being so completely overshadowed by the heart failure. However, the heart failure was right sided with all of the cardiac manifestations of obstruction of the pulmonary circulation. In this instance, what would have to be considered as the pulmonary phase of the disease was long, four or five years. Cyanosis was not present and right-sided heart failure appeared only as a terminal event. In either pulmonary fibrosis or in emphysema, obstruction to the pulmonary circulation is the mechanism by which the condition leads to a fatal determination. It was lacking in this case, and diffuse pulmonary disease would have produced a picture quite different from the case in hand.

As to any acute pulmonary condition, one would consider a pneumonia or pulmonary embolism. The onset of his terminal illness was not that of an ordinary pneumonia, and the fact he had no fever for 48 hours after the onset would be most unusual in pneumonia. Furthermore, there were no signs of consolidation on physical examination, the intoxication of the disease was not present, and cough, sputum, and hemoptysis were likewise lacking. If the shadow shown by x-ray was an infiltration, it was central, which would account for the lack of physical signs, and would suggest an atypical or virus pneumonia. If such were the case here, one would surely have to consider some affection of the myocardium concurrently present, and that the pneumonia threw the balance in an unfavorable direction so far as his cardiac compensation was concerned. One might also consider the extension of a virus pneumonia to the myocardium, but such a viral myocarditis would not account for the antecedent history of increasing dyspnea over four or five years.

With regard to pulmonary embolism, one cannot be too sure. The sudden onset of dyspnea without pain and the delayed febrile response are quite like pulmonary embolism. The signs of infarction were not present, but this is dependent upon the amount of pulmonary congestion, and the shadow in the left hilum could well be pulmonary vessels brought into prominence by embolism. Also, there is the matter of the difference in size of the legs. It was not great and may have been of no significance whatever. A fatal pulmonary embolus is a large one, and the thrombosis of a leg vein responsible for a fatal embolus would be expected to produce more edema than was the case here. It is, however, the course of events which is unlike fatal pulmonary embolism. A large straddle embolus may cause death with such rapidity that the usual manifestations, dyspnea and cyanosis, do not have an opportunity to appear. Others go for longer periods when dyspnea, cyanosis, and shock do manifest themselves, and death is a more profound respiratory struggle, and the cardiac manifestations are those of acute cor pulmonale. Smaller emboli occlude only branches of the pulmonary artery and do not cause death, but such circulatory strain as they produce also falls upon the right-heart. There was no evidence of right heart strain here unless the small right axis deviation could be considered as such. This was the only evidence that could be regarded as indicating any degree of obstruction to the pulmonary circulation. Furthermore, once a pulmonary embolism has occurred and is survived, the patient improves, whereas this man steadily grew worse, but never with evidences of congestive failure until shortly before death, which came after four days. Again, a small and nonfatal pulmonary embolus might create sufficient embarrassment to an already damaged heart to tip the balance toward increasing failure.

As the consideration of the third possibility—was this patient's fundamental difficulty with his heart; it does not appear that he had a longstanding hypertension as his heart was not enlarged, but this does not preclude the possibility of arteriosclerosis of the coronary arteries. In the absence of chronic pulmonary disease to account for his increasing dyspnea over four or five years, one must conclude that his myocardium was at fault. One is struck by the lack of orthopnea as his dyspnea increased, and even more by its absence after entering the hospital here, but right-sided failure never was conspicuous until terminally, as indicated by the slight degree of increase in venous pressure. On the other hand, the circulation time was high on admission, and quite definitely increased during the remaining days of life. One would take this to mean that his heart was having difficulty in emptying itself, but had not yet reached the point of backward failure, with congestion of the venous circulation, or that the circulation of the lung was impeded. What then could produce such a state of myocardial inefficiency over so long a period to culminate in death in heart failure? At his age, one might still consider rheumatism, but in the absence of some evidence of valvular heart disease, much less cardiac enlargement, it would be remarkable to have extensive rheumatic myocarditis. One need not consider syphilis seriously for the Wassermann reaction was negative, and there was nothing to suggest either luetic aortitis or aortic insufficiency. In the rare instance of luetic myocarditis, in the absence of aortitis and aortic insufficiency, the heart has been found much enlarged and failure rapidly progressive. The only types of myocardial disease that would explain the picture are a nonspecific myocarditis—the so-called Fiedler's myocarditis—and arteriosclerotic heart disease, the latter the

result of coronary arteriosclerosis and the diffuse minute scarring that may ensue.

Fielder's myocarditis is an acute inflammation that runs its course with little or no fever, with evidences of stasis in both the greater and lesser circulations and, because of its insidious nature, its duration is by no means well defined. It would hardly seem reasonable that it would be so virulent as to run its course in five days, nor would it account for the increasing shortness of breath that the patient experienced over a period of four or five years. On the other hand, it is not unusual in coronary arteriosclerosis without hypertension to see areas of myocardial degeneration, with fibrotic change as their sequel, which is gradual in its development and which produces a steadily lowering myocardial reserve. Under such circumstances, the heart may or may not be enlarged, and the slowness with which this change develops, allowing collateral circulation to come into play, is a major determining factor in the size of the heart. Such a course of events would best explain what happened in this case. This man had experienced steadily decreasing myocardial reserve as indicated by his increasing dyspnea, but he never developed frank congestive failure.

Four days before death something more acute happened, characterized by extreme dyspnea which seemed much more than mere paroxysmal nocturnal dyspnea and suggested rather a pulmonary embolus or a myocardial infarction. There was no pain associated with this occurrence, and whereas pain is a usual accompaniment of myocardial infarction, it may be absent. Likewise, there was no specific electrocardiographic change. These are not essential, and one can be led astray when one refuses to make a diagnosis of myocardial infarction in the absence of specific electrocardiographic changes. The most disturbing feature in reaching such a conclusion is the size of his heart. With it definitely enlarged, this would be important, and White goes so far as to say that a very large infarct is always attended by cardiac enlargement.

In contrast, when the patient was admitted to the hospital, the heart sounds were described as distant and they steadily deteriorated in quality until they were described as "mushy." A protodiastolic gallop was present, which became increasingly more pronounced. Thirty-six hours after the event, he developed fever which continued, and there was some leukocytosis, but the time and nature of the febrile response would be in accordance with either a myocardial infarction or a pulmonary embolism. It seems to me that the weight of the evidence points to this patient's fundamental difficulty being myocardial rather than pulmonary, and that he had coronary arteriosclerosis with diffuse fibrosis rather than a nonspecific type of myocarditis, which occasioned a steadily decreasing myocardial reserve.

As a terminal event again, the weight of the evidence points to a pulmonary embolism as indicated by the sudden increase of dyspnea, the lack of pain, absence of specific electrocardiographic change but rather a tendency to right axis deviation, the delayed febrile response with some leukocytosis, and the possible source for an embolus in a leg vein. Following this added insult, myocardial failure ensued, causing his death four days later. This would account for the pulmonary shadow in the left hilum as prominent pulmonary vessels rather than to consider it an unrelated pneumonia or at most tipping the balance toward failure. With such an interpretation, it is not easy to explain the terminal lower abdominal pain unless it could be an embolism to an abdominal artery from a mural thrombus, for it takes but little failure for mural thrombi to form.

One cannot be too sure that he did not have a myocardial infarct, but the weight of the evidence seems to me against it. For me, it is difficult, however, to make the decision because the underlying changes thought to be present in the heart would certainly be conducive to myocardial infarction, but there is important evidence which seems to me to be lacking.

Discussion

Dr. Berthrong. Mr. Chairman, Ladies, and Gentleman: In spite of my lack of seniority before this audience and Dr. Wainwright, I must still fulfill a role of the pathologist which, at such a gathering, is to harass the clinician. I am sure this will be accepted without offense. Dr. Wainwright, of course I look at it in retrospect, but it seems to me as though a very prominent feature in this person's illness began as and continued to be dyspnea. This seemed to be completely out of proportion to the patient's chest signs and to his x-ray. In my recollection, most patients who die with left ventricular strain such as would be produced by chronic coronary insufficiency should show more pulmonary signs, should show rales at the base, should not show the severe dyspnea seen in this patient which was not increased by lying flat in bed. I don't recall patients with left ventricular failure exhibiting such manifestations. Would you comment on that?

Dr. Wainwright. Dr. Berthrong, that is quite true. It is very difficult to explain. I think sometimes that the amount of congestion in the lung is very variable; it may be minimal and scarcely detectable whereas at other times, it is very prominent,

and I must confess I'd be far more happy and feel far more secure in my conclusions about this man had he definite evidence of pulmonary congestion.

Dr. Berthrong. This is an extremely interesting case, not common, but I think it is not as rare as has been noted in the past. Autopsy showed an extremely obese white man who at the time of postmortem had intense cyanosis. This cyanosis was peculiarly noted in the face and upper extremities, and I do not have an explanation for that distribution. It was noted in Dr. Wainwright's discussion, and he emphasized it in discussing the development of pulmonary emboli, that one of the legs had an increased circumference. The measurement specifically showed that the right leg in the calf region and in the thighs was three to four centimeters larger than the left. I am not completely convinced that our postmortem data show that small variations in leg circumference are significant, but when it is as of great a difference as this patient exhibited, I am sure it may be of great importance. It was furthermore noted at postmortem examination that when the prosector attempted to milk blood from the veins of the right leg, none could be obtained. Unfortunately, we are not permitted to dissect the extremities, so we do not know what was in the leg veins. The heart was enlarged and weighed 450 grams. This enlargement was essentially limited to the right ventricle (**Figure 2**). In the major pulmonary arteries, adherent and fresh thrombi were seen (**Figure 3**). Microscopic sections showed organization of many of the large thrombi, extensive enough to suspect that the thrombi had been present for many weeks, even months (**Figure 4**). Other thrombi were quite fresh and obviously had occluded the small lumina remaining after the old thrombi had organized. These fresh thrombi, whether arising *in situ* or as

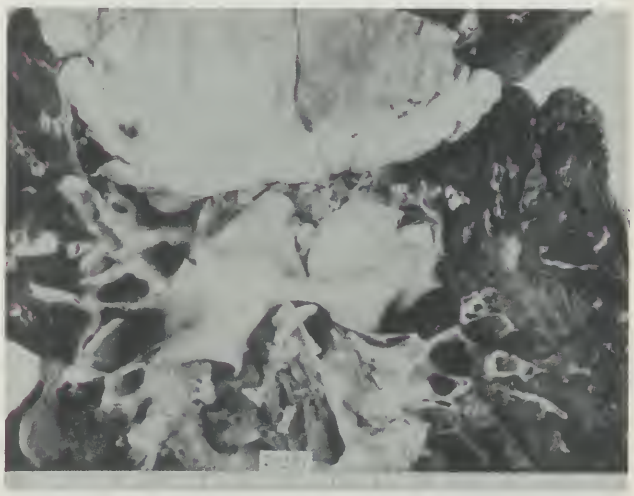


Figure 3. In the major pulmonary arteries, adherent and fresh thrombi were seen.



Figure 2. The heart was enlarged and weighed 450 grams.

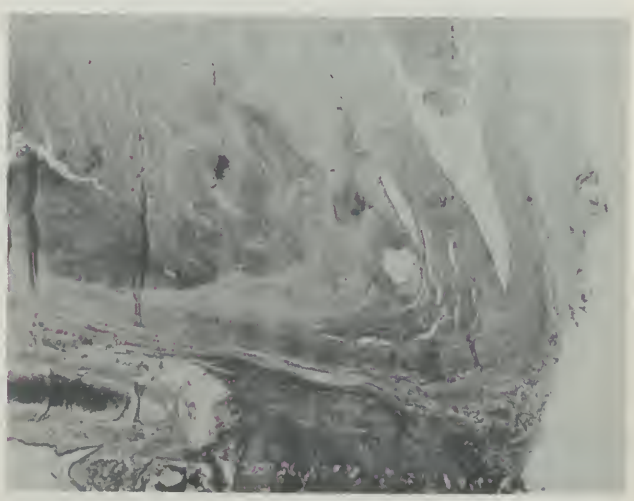


Figure 4. Microscopic sections showed organizations of many of the large thombi, extensive enough to suspect that the thrombi had been present for many weeks.

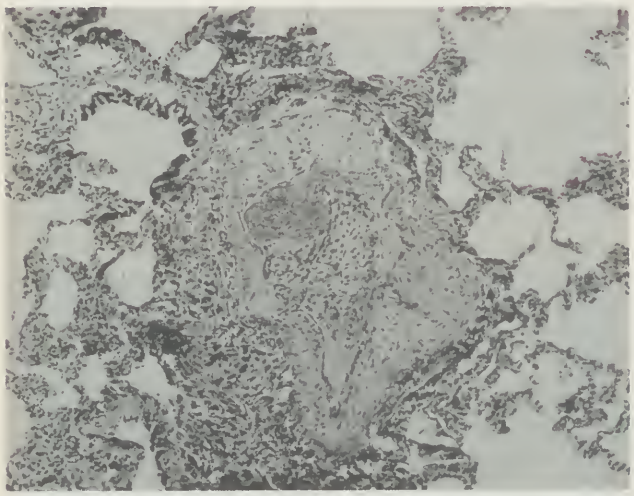


Figure 5. Smaller pulmonary arteries in the lung which contain partially organized thrombi.

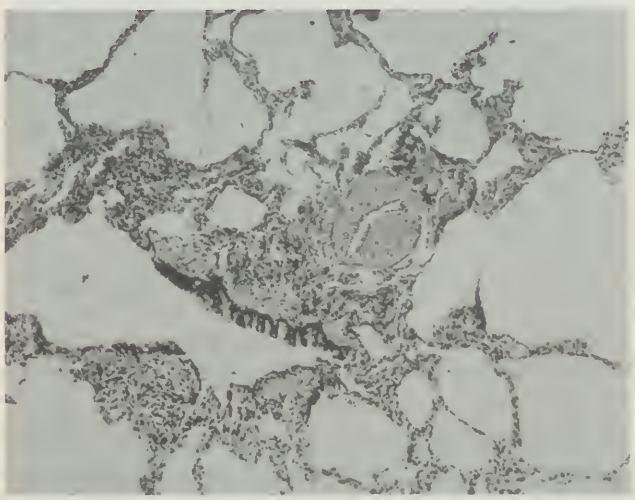


Figure 6. Marked arteriosclerotic changes in the smaller pulmonary arteries.

emboli, were doubtlessly the cause of the terminal episode that Dr. Wainwright correctly diagnosed.

Other sections showed smaller pulmonary arteries in the lung which contain partially organized thrombi (**Figure 5**). The pulmonary parenchyma was normal except for the presence of considerable anthracosis and occasional small silicotic nodules. Very interestingly, there were marked arteriosclerotic changes in the smaller pulmonary arteries (**Figure 6**). I say "arteriosclerotic" because these were typical of the pulmonary arteriosclerosis that is seen in so-called Ayerza's disease. It should be pointed out that these plaques of intimal proliferation were also compatible with old thrombi that had been completely organized and recanalized to leave small crescentic-shape lumina in these terminal pulmonary arteries.

We now can postulate that this patient, for some unknown reason, began to develop pulmonary embolization or thrombosis four or five months ago, which partially occluded his major pulmonary arteries. Smaller emboli occurred in smaller pulmonary vessels. Why he did not exhibit more of the clinical manifestations of chronic cor pulmonale is not entirely clear. The relationship of the mild but definitely pulmonary silicosis to these pulmonary thrombi cannot be clearly stated. We have had possibly 10 autopsies of cases of this syndrome in the past few years. It is becoming of increasing importance to recognize this peculiar clinical combination of severe dyspnea in the absence of prominent chest signs and often with cough and often with prominent hilar shadows by x-ray, which I think must represent dilated major pulmonary vessels proximal to the thrombi or even the vessels enlarged by the thrombi. All of the patients have not manifested an absence of orthopnea, but others have shown it as a prominent feature. Some of the patients are cyanotic, which is not always easily explained. In this patient, I think it is perfectly clear that as the right atrial pressure rose, there was an anatomical patency of the foramen ovale allowing a shunt of blood across from right to left and providing an easy explanation for the cyanosis. All of the patients have not had a patent foramen ovale, and the explanation of cyanosis is then not understood. The thrombus material has been found in the major pulmonary arteries in all of our cases, which has led to incomplete occlusion or stenosis of the major arteries. Since death did not occur immediately, symptoms developed later when the pulmonary stenosis resulted in right ventricular strain and eventual failure. The origin of the emboli has occasionally been found in the leg veins but in others, as in this case, no source for emboli or etiology for thrombosis has been discovered. Since left ventricular failure has usually not been present in these cases, pulmonary infarcts have not been seen.

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Commentary

Summary of the NIH consensus statement on the diagnosis and treatment of early melanoma

Melanoma is the most lethal form of skin cancer, and its incidence has been increasing rapidly. It is estimated that, in the United States alone, 32,000 individuals will have developed melanoma in 1992, and 6,700 will die of the disease.

Early melanoma is extremely curable, but once the cancer has spread, treatment is usually ineffective. Potentially, most melanomas can be caught early because of their location on the skin surface. However, the specific criteria for diagnosing early lesions have not been completely agreed upon.

Appropriate treatment and follow-up of patients with early melanoma have also been the subjects of controversy. In addition, there has been considerable debate over the significance for later development of melanoma of skin lesions known as dysplastic nevi.

To evaluate current research on these subjects and resolve the major issues, the National Cancer Institute, the National Institute of Arthritis and Musculoskeletal and Skin Diseases, and the National Institutes of Health (NIH) Office of Medical Applications of Research sponsored a Consensus Development Conference on the Diagnosis and Treatment of Early Melanoma on January 27-29, 1992. Based on scientific presentations and discussions from physicians, scientists, and health care professionals, a 13-member panel wrote a consensus statement. Following are the panel's findings:

- The diagnosis of early melanoma (melanoma *in situ* and invasive melanoma < 1.0 mm measured depth) is important because
  - Melanoma *in situ* is a distinct diagnostic entity effectively treated surgically with 0.5 cm margins.
  - Thin invasive melanoma, < 1.0 mm in measured depth, has the potential for long-term survival in more than 90% of patients after surgical excision with a 1.0 cm margin.
- Minimal criteria for an acceptable pathology report for melanoma include diagnosis, depth of invasion (thickness), and status of margins.
- Elective lymph node dissections and extensive staging evaluations are not recommended in early melanoma.
- Patients with early melanoma are at low risk for relapse but may be at high risk for development of subsequent melanomas and should be followed closely.
- Some family members of patients with melanoma are at increased risk for melanoma and should be enrolled in surveillance programs.
- The use of "dysplastic nevus" as a clinical and histologic diagnosis is discouraged. The clinical lesions should be described as "atypical moles." Lesions with the appropriate constellation of microscopic features should be reported as "nevi with architectural disorder," accompanied by a statement describing the presence and degree of melanocyte atypia. The biologic significance of these nevi must be determined by the clinical features and family history of each case.
- The familial atypical mole and melanoma syndrome (FAM-M) is clinically recognizable. Individuals with this syndrome have an increased risk of developing melanoma. Careful surveillance of these patients is necessary.
- Education and screening programs have the potential to decrease morbidity and mortality from melanoma.
- The public should be made aware of (1) the increased risk of melanoma related to excessive sun exposure, particularly in childhood; (2) the clinical appearance of early melanoma; (3) the excellent prognosis associated with detection and treatment of early melanoma; and (4) the need for regular skin examinations by themselves and by their physician.

Free, single copies of the complete *NIH Consensus Statement on Diagnosis and Treatment of Early Melanoma* may be ordered from the Office of Medical Applications of Research, National Institutes of Health, Federal Building, Room 618, Bethesda, Maryland 20892, phone 301-496-1143.

Early melanoma: diagnosis and treatment. A synopsis of conference findings with relevant literature citations

In late January of 1992, the National Institutes of Health (NIH) convened a Consensus Development Conference on Diagnosis and Treatment of Early Melanoma. Panel participants included dermatologists, pathologists, epidemiologists, and other health care professionals as well as experts in public education, surveillance techniques, and potential new technologies. The focus of panel discussions revolved around six questions on early melanoma. In the following paragraphs, I will list each question and, except for question six, will provide a synopsis of the panel findings citing

pertinent literature references where they apply. Additionally, clinical and histologic prognostic indicators of early melanoma will be discussed with question 1.

What are the clinical and histologic characteristics of early melanoma?

The ability to recognize early melanoma is critical since long-term, disease-free survival is >99% for patients with melanoma *in situ* and >90% for those with melanoma less than 1 mm in thickness.[1] The panel defined early melanoma as thin invasive lesions <1 mm in depth including melanoma *in situ* (MIS). Clinically, early melanoma is a flat or elevated lesion that exhibits the ABCD criteria of **A**symmetry, irregular **B**order, variegated **C**olor, and a **D**iameter of >6 mm.[2] Exceptions to these criteria exist, such as melanomas with uniform color and diameters <6 mm.[3-4]

A fully evolved melanoma in histologic terms was defined as a lesion exhibiting atypical melanocytes in cohesive clusters and single cells dispersed throughout the full thickness of the epidermis which, when invasive, forms an asymmetric dermal growth of nonmaturing, atypical epithelioid and/or spindled pleomorphic melanocytes with increased nuclear/cytoplasmic ratio and abundant eosinophilic cytoplasm. Mitoses, sometimes atypical, may be present in melanoma cells along with inflammatory host response, regression, angioinvasion, and satellitosis.

Although controversial,[5-7] MIS was histologically defined as melanoma confined to the full thickness of the epidermis and adnexal epithelium. Other vigorously debated clinical/pathologic terms for MIS were mentioned for completeness: lentigo maligna, atypical melanocytic proliferation, and pagetoid proliferation. Significantly, the panel stated that once completely removed, MIS should have **no** impact on a patient's longevity or insurability.

In its review of clinical and histologic prognostic indicators, the panel concluded that histologic depth of invasion was the feature most predictive for melanoma reoccurrence and prognosis. Other factors (e.g., ulceration, regression, anatomic location) may be considered, with ulceration being the second most significant.[1,8-13] At a minimum, the pathology report should include diagnosis, measured thickness (mm) of melanoma, and status of margins. Other factors mentioned above may be reported as suggested in a recent publication outlining a statistical method for predicting survival in stage I melanoma.[8]

What is the appropriate diagnosis, management, and follow-up of patients with early melanoma?

In the initial surgery of a suspected melanoma, an appropriate excisional or incisional biopsy submitted in fixative (formalin) is critical to the diagnosis and microstaging of the lesion. Once diagnosed, the patient should undergo a history and physical to identify risk factors, possible signs and symptoms of metastases, atypical moles, and other melanomas. Current recommendations for surgical therapy of early melanoma are 0.5 cm for MIS and 1 cm for thin invasive melanomas <1 mm in thickness.[14-16] Elective regional lymph node dissection is not indicated in early invasive melanoma.[17]

After treatment of early melanoma, should patients and family members be followed: why and how?

Postsurgical follow-up of early melanoma is important since long-term survival is excellent and the risk for another melanoma is significant (3%–8%).[18] Follow-up becomes especially important in patients with atypical moles (discussed below) since there is increased risk in this patient population, particularly in melanoma-prone families.[19] Follow-up includes interval examination of patient's skin, including the removal site, as well as regional lymph nodes where possible. Interval times vary from every six months for patients without atypical moles to three to six months for those with this risk factor. Photographic documentation of atypical moles for subsequent follow-up comparison may be useful, and patient counseling in monthly self-examination of the skin, avoidance of excessive sun exposure, and sunscreen protection is helpful. Because familial melanoma is an important risk factor for the development of melanoma, it may be worthwhile to screen first- and second-degree relatives of all patients with melanoma.[20] Even though MIS has little risk for relapse, prudence dictates follow-up of these patients with serial skin examinations including the removal site.

Do dysplastic nevi exist and what is their significance?

"Dysplastic nevus" is a term formerly used to describe acquired pigmented lesions of skin different in histological and clinical appearance from normal moles and which may be sporadic or familial.[21-24] Because the terms "dysplastic nevus" and "dysplastic nevus syndrome" are controversial, their use is discouraged and "atypical mole" and "familial atypical mole syndrome (FAMS)" are recommended instead.

Atypical moles are variable in size (often larger than common moles), color, and border, and frequently found on the trunk. FAMS is defined by families with one or more melanomas in first-degree relatives; large number of moles, frequently atypical, in affected kindred; and moles exhibiting certain histologic characteristics.[21-28]

An atypical mole is generally diagnosed using histologic criteria of architectural disorder with asymmetry (compared with junctional and compound moles), lentiginous melanocytic

hyperplasia with variably sized spindle and epithelioid melanocytes that fuse with adjacent rete ridges to form bridges, subepidermal concentric and lamellar fibroplasia, and variable superficial dermal perivascular infiltrate. Interobserver reproducibility in defining melanocytic nuclear atypia in dysplastic nevi is the crux of the problem. Because the terms dysplasia and "dysplastic nevus" are so controversial,[22,25-30] the panel recommends these lesions should be histologically described as "nevi with architectural disorder" (i.e., junction or compound nevus with architectural disorder). A statement as to presence and degree of melanocytic atypia should be included. The panel also recommended that a reproducible schema for diagnosing and reporting these nevi should be formulated. Incompletely excised atypical moles should be reported by the pathologist and, if indicated, re-excision with 2-5 mm margins is appropriate.

Identifying FAMS patients is important because of the markedly increased risk of developing melanoma throughout their lifetime. The need for increased surveillance in this group of patients is obvious. Surveillance is defined as physician follow-up at four to six month intervals, possibly including high quality body photographs. Patient education and self-examination are equally important. *De novo* or pre-existing moles should be appropriately biopsied if change occurs in asymmetry, border, color, or diameter.[18,20-21]

Occurring in the general population are nonfamilial atypical moles that are clinically and histologically identical to the familial variant.[22,24] The relative risk of melanoma in this group of patients as compared with the familial variant is less but still significant (7%).[19] Surveillance of sporadic atypical mole patients is recommended, but studies are needed to define the necessary time interval.

What is the role of education and screening in preventing melanoma morbidity and mortality?

By the year 2000, one out of every 75 white Americans will develop a melanoma in his or her lifetime.[31] The role of education and screening in preventing melanoma morbidity and mortality becomes paramount. Ongoing public education through mass media campaigns, educational campaigns in schools, work sites, and other community settings, as well as physician and health care provider education of patients in recognizing early melanoma and its risk factors are critical.[20,32] Specifically, patients and the public should be made aware of the increased risk of melanoma related to excessive sun exposure particularly in childhood, the clinical appearance of early melanoma, the excellent prognosis associated with detection and treatment of early melanoma, and the need for regular skin examinations by themselves and their health professionals.

What are the future directions for research including primary prevention?

The consensus panel explored 14 future clinical, biological, and public health directions for research of early melanoma including primary prevention (risk reduction). The reader is referred to the consensus statement booklet issued by the National Institutes of Health for the future directions of research as well as the full text of the consensus panel's statement.

Summary

In summary, 13 panelists and 23 featured speakers convened in late January 1992 in an attempt to define early melanoma clinically and histologically; develop treatment guidelines including follow-up for early melanoma; wrestle with the controversial issues of dysplastic nevus and dysplasia; formulate plans, present and future, for public education and screening of early melanoma; and list future directions for research and primary prevention in early melanoma. The panel accomplished its goals all within the incredibly short time of three days (January 27-29, 1992). While criticism has been raised with regard to the panel's findings,[32] the medical community owes a debt of gratitude to the participants for the selfless giving of time, energy and expertise.

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Another way to save a life

In 1989, J. Everett Koop M.D., then US Surgeon General, urged the medical community to become more involved and responsive to domestic violence in our country. He said, "Physical abuse of women and children is an overwhelming moral, economic, and public health burden." That is an understatement.

Last September, the *Washington Post* published the Yale University study on the statistics of violence against women. Between 1979 and 1987, 5,632,400 cases of family violence were reported in the United States. Since women and physicians are reluctant to report such events, complete figures are difficult to obtain. These statistics are limited to serious assaults such as those that occur with the use of a weapon. Punching, kicking, throwing, choking, and other physical methods are seldom reported unless they lead to serious medical injuries.

Here are some startling facts about family violence of which you may not be aware:

- Domestic violence touches one fourth of all American families at all levels of society.
- Every 15 seconds a women is beaten by her husband or boyfriend.
- One fifth to one half of all American women were sexually abused as children, most of them by an older male relative.
- Battering is the single most common source of injury to women—more common than the combined number of auto accidents, muggings, and rapes by strangers.
- One of every two American women will be beaten at least once in the course of an intimate relationship; 75% of women who are battered are divorced or separated from their abusers at the time of the incident.
- Approximately 35% of women who visit the emergency room are there for symptoms related to ongoing abuse; as few as 5% of the victims are identified as such.
- Thirty percent of the women killed in the United States die at the hands of a husband or boyfriend.

Heartbreaking are the additional statistics on children:

- Last year, 1,383 children in the United States were killed by abuse. More than half of these children were under the age of one.
- Child homicide is now one of the five leading causes of death in childhood; the majority of infant victims were killed by parents, relatives, or older children.



These are not statistics of a foreign country at war. This is more than just a "public health burden." These are Americans beating and killing their families!

With these facts and the realization that medical costs for domestic violence are over $44 million annually, it is no wonder that the American Medical Association (AMA) kicked off the *Physician Campaign Against Family Violence* in October 1991.

What physicians can do

Antonia C. Novello, M.D., M.P.H., surgeon general, wrote in the June 1992 *JAMA*:

> Domestic violence is an extensive, pervading, and entrenched problem in the United States. It is an outrage to women and the entire American family....
>
> As health professionals, we must make an effort to end domestic violence, both inside and outside the home. Our awareness, our intolerance of violence, and our active intervention can greatly diminish the license for domestic abuse. As professionals, we can make a remarkable difference.

Here is what Dr. Ann Flitcraft, assistant professor of medicine at the University of Connecticut and co-director of the New Haven–based domestic violence training project, recommends physicians do (*JAMA*, August 1990):

1. We need to identify domestic violence, to name it as a problem, and to acknowledge that we share the same concern that (the patient) has.... The very acknowledgment that domestic violence is going on and that you and (the patient) agree it is a serious problem is very powerful and a therapeutic first step.
2. Physicians can assess the woman's safety by asking about the extent of the violence she faces, whether there are weapons involved, whether the children are being threatened, and if she has a safe place to go.
3. Physicians can provide patients with information about legal and community sources available for battered women and their children.
4. Above all, we need to support the decisions [the patient] makes to best end the violence in her life....

Flitcraft summarizes by saying, "Quicker than you can

put on a Bandaid, you can acknowledge the violence, you can assert that this is illegal, not her fault, and that a lot of women are in this situation.

"You can educate her about community-based resources available to help her and ask, 'Are you safe?' These are the important elements that affirm that violence is a problem and a threat to her mental and physical health. It is more important than whether she comes back to get her stitches out on Tuesday or Wednesday."

Other recommendations that may also be helpful include

- Provide information packets in the examination room. If placed in the waiting room or lobby, a woman might not pick them up and read them in front of others
- Encourage your patients, and provide the phone numbers, to call local shelters, safe houses, and legal services for information regarding counseling and support groups. If patients do not respond the first time, give them a second chance. Keep your door open to them.
- Be sure it is you, not your office staff, who provides this most confidential information to your patients.
- Ask your county medical society and auxiliary to put together information packets to be distributed to all physicians in your county.

All physicians see abused patients, not just emergency room doctors. Violence in the home can manifest itself in ways such as abdominal pains, sleeping and eating disorders, depression, chronic headaches, joint pains, chemical dependency, and suicide attempts. So the next time a woman comes to see you who you suspect may be a victim of this terrible violence epidemic, ask her, "Are you safe?" Give her the medicine she really needs—information for a way out of her situation. It may be the prescription that saves her life.

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KAREN L. (SPRINTZIN) MAUSNER
Ms. Mausner was the 1991-1992 president of the Auxiliary to the Montgomery County Medical Society. ■

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Resources for physicians

Here is a list of some of the many resources available to help victims of family violence. If you do not have these numbers on your Rolodex, please write them down or cut them out now.

National organizations

AMA National Coalition of Physicians Against Family Violence
515 North State St.
Chicago, IL 60610
1-800-262-3211

Auxiliary Family Violence Guidelines
312-464-4470

National Domestic Violence Hotline
24-hour hotline for battered women's shelters across the country.
800-333-SAFE

National Organization for Victim Assistance
Crisis intervention, counseling, medical and legal advice, and referrals to 8,000 victim-assistance programs nationwide.
202-393-NOVA
202-232-6682

National Child Abuse Hot Line
1-800-422-4453

National Court Appointed Special Advocate Association (CASA)
Represents children.
206-328-8588

Parents Anonymous
Support and education group for parents who have abused or fear they will abuse their children.
To find local chapters, call
1-800-421-0353

State of Maryland

Network Against Domestic Violence
c/o YWCA Women's Center
67 Duke of Glouchester St.
Annapolis, MD 21401
410-268-4393

County organizations

Allegany and Garrett counties
Family Crisis Resource Center
301-759-9247

Anne Arundel County
YWCA Battered Spouse Program
410-268-4393
410-269-0378
410-222-7273 (Hotline)

Baltimore City
House of Ruth
410-889-0840

Baltimore County
Family Crisis Center of Baltimore County
410-285-4357
Family and Children Services
410-281-1334
Sexual Assault/Domestic Violence Center
410-377-8111
Baltimore County hotline
410-828-6390

Calvert County
Abused Persons Program
301-855-1075
410-535-1221
410-269-1051

Caroline, Dorchester, Kent, Queen Anne's, and Talbot counties
Mid Shore Council on Family Violence
410-479-1149
410-822-5276 (hotline)

Carroll County
Family and Children Services
410-876-1233
410-857-0900 (hotline)

Cecil County
Domestic Violence Program
410-996-0444

Charles County
Community Crisis and Referral Center
301-645-8994

Frederick County
Heartly House
301-662-8800 (abused persons and rape crisis)
301-662-0633 (sexual abuse)
301-662-2255 (crisis intervention)

Harford County
Sexual Assault/Spouse Abuse Resource Center
410-879-3486
410-836-8430

Howard County
Domestic Violence Center of Howard County
410-997-0304

Montgomery County
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301-654-1881
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301-986-5885
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301-656-9420
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301-738-2255
Child Protective Services
301-217-4417

Prince George's County
Family Crisis Center
301-864-9101

St. Mary's County
Walden Sierra
301-862-4880

Somerset, Wicomico, and Worcester counties
Life Crisis Center
410-749-4357
410-794-0774

Washington County
CASA Shelter for Abused Women
301-739-8975 (24-hour hotline)
301-739-4990 (Office)
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301-791-4059 (Adult services—Domestic violence)
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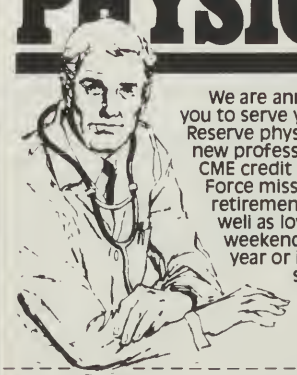
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The Maryland Medical Journal (MMJ) *is a monthly publication of the Medical and Chirurgical Faculty of Maryland. The journal's goals are educational and informative: the publishing of scientific articles (original research, case studies, and review articles) and other technical information, as well as editorials, letters, special articles (evaluations, position papers, reviews of nonscientific subjects), membership and legislative news, continuing medical education notices, and programs and policies of the faculty.*

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  1. Stevens MB. The clinical spectrum of SLE. Md Med J 1991; 10:875–85.
  2. Ropes MW. Characteristics, manifestations, and pathologic findings. In: Ropes MD, ed. Systemic Lupus Erythematosus. Cambridge, MA: Harvard University Press. 1976; 50–4.

- ***Tables***—Tables should be typed on separate sheets of paper, be numbered, and have a brief descriptive title. Data presented in tables should be self-explanatory and should supplement, not duplicate, the text; the Editor reserves the right to edit tables. Authors should be sure that statistics are consistent in both tables and text.

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The Johns Hopkins Medical Institutions

All courses at the Thomas B. Turner Building unless otherwise indicated. For information on continuing medical education activities, contact the Office of Continuing Education, 720 Rutland Ave., Baltimore, Maryland 21205 (410-955-2959).

New frontiers in atherosclerosis and lipoprotein metabolism. Cat 1 AMA/PRA credits available. Fee: $200. — **May 13-14**

6th summer institute in environmental health studies. Info: Dr. Jacqueline Corn or Linda Lamb, 410-955-2609. — **June 7-18**

Basic endoscopic sinus surgery. 19 Cat 1 AMA/PRA credits: lab and lectures; 14.5 Cat 1 AMA/PRA credits: lectures only. Fee: $1,250 laboratory and lectures; $295 lectures only. — **June 17-18**

Tuberculosis in the 90s: Epidemiology, treatment, and control. Cat 1 AMA/PRA credits available. Fee: $165 physicians; $85 residents, fellows, and allied health professionals. — **June 21**

Control of biohazards in the research laboratory, at the Hampton House Auditorium. Info: Dr. Jacqueline Corn or Linda Lamb, 410-955-2609. — **June 21-25**

Coordination and monitoring of clinical trials. Cat 1 AMA/PRA credits available. — **July 8-9**

Symposium on bone marrow transplantation—Current concepts and future directions. 7 Cat 1 AMA/PRA credits. Fee: $40. — **July 16**

2nd annual update on obstetric anesthesia plus an optional fiberoptic airway management workshop, at the Hyatt Regency Inner Harbor, Baltimore, Maryland. 12 Cat 1 AMA/PRA credits. Fee: $275 physicians; $175 CRNAs; $75 residents and fellows. — **Aug. 21-22**

Airway management/fiberoptics, patient care and dissemination of critical information. Cat 1 AMA/PRA credits available. Fee: $650. — **Sept. 10-12**

7th annual core content of emergency medicine: A comprehensive review, at the Marriott Hotel, Baltimore-Washington International Airport, Baltimore, Maryland. Cat 1 AMA/PRA credits available. Fee $995. — **Sept. 10-16**

22nd annual diagnostic ultrasound in gynecology and obstetrics and abdomen, at the Stouffer Harborplace Hotel, Baltimore, Maryland. 16.5 Cat 1 AMA/PRA credits. Fee: physicians: 3 days, $400; 2 days, $300; 1 day, $150. — **Sept. 17-19**

Diabetic retinopathy. 8 Cat 1 AMA/PRA credits. Fee: $200 physicians; $100 residents, fellows, and allied health professionals. — **Oct. 29**

Practical management of the uveitis patient. 8 Cat 1 AMA/PRA credits. Fee: $200 physicians; $100 residents, fellows, and allied health professionals. — **Oct. 30**

Continuously throughout the year

Visiting preceptorship in pediatric critical care medicine. Ongoing five-day preceptorship by appointment. 40 Cat 1 AMA/PRA credits. Fee: $600.

The department of radiology and radiological sciences offers several courses in abdominal and obstetrical ultrasound. Info: P. Williams, 410-955-3169.

Visiting physicians. Offered throughout the year for experience in the lab and participation in read-in sessions; by appointment only. 40 Cat 1 AMA/PRA credits. Fee: $500.

Johns Hopkins medical grand rounds. Accredited audiovisual continuing education series of case discussions for clinicians; 30 topics per year in five bimonthly programs. Individual and group subscriptions. 40 Cat 1 AMA/PRA credits. Info: 410-955-3988.

Miscellaneous meetings

Maryland Academy of Family Physicians 45th annual meeting and scientific session, at the Princess Royale Oceanfront Hotel and Conference Center, Ocean City, Maryland. 41.25 Cat 1 AMA/PRA credits; 41.25 AAFP prescribed hours. Fee: $240 members; $275 nonmembers; $135 paramedicals; No charge for residents, medical students, MAFP retired and life members. Info: Francis C. Bruno, M.D., 410-747-1980. **May 18-23**

6th annual trauma anesthesia and critical care symposium, sponsored by the International Trauma Anesthesia and Critical Care Society (ITACCS) and Multinational Academic Consortium, at the Hyatt Regency, Baltimore, Maryland. Info: Kimberly C.A. Unitas, 410-328-2399. **May 20-22**

Virginia Society of Ophthalmology annual meeting, at the Norfolk Marriott Waterside, Norfolk, Virginia. Info: Donna Scott, 804-353-2721. **May 21-22**

Death and dying: The physician's trials and tribulations, sponsored by the Baltimore City Medical Society. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. **June 3**

Systemic lupus erythematosus update for primary care physicians, sponsored by the Maryland Lupus Foundation and the University of Maryland School of Medicine. 5 Cat 1 AMA/PRA credits; 5 AAFP prescribed hours. Fee: $75.00. Info: 410-337-9000. **June 5**

9th annual Eastern Virginia Medical School family medicine review course, at the Cavalier Hotel, Virginia Beach, Virginia. Info: 804-446-6140. **June 6-11**

Substance abuse education for primary care physicians: An overview of treating the substance abusing patient, sponsored by the Medical and Chirurgical Faculty of Maryland, at the Mercy Medical Center, Baltimore, Maryland. 1 Cat 1 AMA/PRA credit; 1 AAFP prescribed hour. Fee: none. Info: Carmine M. Valente, Ph.D., 410-539-0872 or 1-800-492-1056. **June 9**

Board review in family practice, sponsored by the George Washington University, at the Marriott Crystal Gateway Hotel, Arlington, Virginia. 41 Cat 1 AMA/PRA credits. Fee: $625 physicians; $495 residents and fellows; $395 allied health professionals. Info: John F. Vargo, 202-994-4285. **June 12-16**

INMEDs fourth annual millennium conference, sponsored by the International Medical Services for Health (INMED) and the Tulane University School of Public Health and Tropical Medicine, Sheraton City Centre Hotel, Washington, DC. Info: 703-444-4477. **June 15-18**

11th summer symposium in internal medicine, at the Fort Magruder Inn & Conference Center, Williamsburg, Virginia. Info: 804-446-6140. **June 25-27**

16th annual flap dissection workshop, at the Virginia Beach Conference Center, Virginia Beach, Virginia. Info: 804-446-6140. **July 6-10**

Imaging the augmented breast, sponsored by the Baltimore City Medical Society. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. **Sept. 2**

1993 Med Chi semiannual meeting, at the Sheraton Ocean City Resort and Conference Center, Ocean City, Maryland. Info: Vivian Smith, 410-539-0872 or 800-492-1056. **Sept. 10-12**

The decade of the brain: An international conference, sponsored by the George Washington University, at the Omni-Shoreham, Washington, DC. 28 Cat 1 AMA/PRA credits. Info: John F. Vargo, 202-994-4285. **Sept. 11-14**

5th annual trauma conference, sponsored by the Peninsula Regional Medical Center, at the Sheraton Ocean City Resort and Conference Center, Ocean City, MD. Info: Darlene Kwiatkowski, 410-543-7328. **Sept. 16-17**

14th international congress of lymphology, sponsored by the International Society of Lymphology (ISL). Part 1: "Frontiers in Lymphology" at the Hyatt Regency, Baltimore, Maryland. Part 2: "Lymphology in 1993" at the Ramada Renaissance Techworld, Washington, DC. Info: Grace Wagner, Program Coordinator, 602-626-6118. **Sept. 20-26**

International liver symposium, sponsored by the George Washington University, at the Marriott Crystal Gateway Hotel, Arlington, Virginia. Info: Daniel E. Reichard, 202-994-4285. **Oct. 1-3**

Causes of the medical malpractice crisis, sponsored by the Baltimore City Medical Society. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. **Oct. 7**

Gastroenterology board review course, sponsored by the George Washington University, at the Marriott Crystal Gateway Hotel, Arlington, Virginia. 42 Cat 1 AMA/PRA credits. Fee: $625 physicians; $500 residents and fellows. Info: Daniel E. Reichard, 202-994-4285. **Oct. 9-13**

Medical oncology board review course, sponsored by the George Washington University, at the Ritz-Carlton, Pentagon City, Virginia. Info: John F. Vargo, 202-994-4285. **Oct. 9-13**

7th annual national disability management conference and exhibit, sponsored by the Washington Business Group on Health, at the Crystal Gateway Marriott, Arlington, Virginia. Info: Kristina Tanasichuk, 202-408-9320. **Oct. 25-26**

Continuously throughout the year

Fluorescein angiography conference, sponsored by the Retina Center, St. Joseph Hospital, Baltimore, Maryland, first and third Mondays of each month; 8:00-9:00 am. Fee: none. Info: R. Classon, 410-337-4500.

DIRECTORSHIP OF NEW HOSPITAL EMERGENCY DEPARTMENT:

The Atlantic General Hospital, serving the community on Maryland's Eastern Shore, will open its doors in May of '93. Professional Emergency Physicians is seeking BC/BP physician, residency trained in Emergency Medicine, for Director of new hospital Emergency Department starting in the Spring of 1993. Excellent salary and benefits with partnership in our emergency medicine physician owned corporation. Send C.V. to Search Committee, James A. D'Orta, M.D., 199 Lionhead Court, Baltimore, MD 21237, Fax or Tel: (410) 686-2124.

Shady Grove Adventist Hospital,

9901 Medical Center Drive, Rockville, Maryland. Info: 301-279-6115.

Long-term problems after repair of congenital heart disease	May 6
TMJ pain; fact or fiction	May 13
The vascular surgeon and the diabetic foot	May 20
Tumor board conference	May 27
Medications errors and how to avoid them	June 3
Controlling multiple coronary risk factors in clinical practice	June 10
How to get paid in accident cases	June 17
Tumor Conference	June 24

PHYSICIAN'S RECOGNITION AWARD

During March 1993, the physicians listed below received the American Medical Association (AMA) Physician's Recognition Award. Established in 1968, the award's purpose is to encourage physician participation in continuing medical education and to recognize those physicians who have voluntarily completed programs of continuing medical education.

William Gilbert Armiger
Michael Brody
Danilo Ramon M. Coronel
Michael Ereshevich
Mark Robert Fesen
John David Foulke
Robert Saul Frankel
Daniel Matthew Gordon
Ruth Kevess-Cohen
Joel Sol Kleinman
Donald Frederick Manger
Donald Louis Miller
Keiffer Jackson Mitchell
Amatun Naeem
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Consultation, a weekly radio program sponsored by the Medical and Chirurgical Faculty of Maryland allows Med Chi physicians to appear each week on WBAL to discuss the lastest developments in medicine and to answer questions about health issues. Med Chi currently airs the following program of Consultation weekly:

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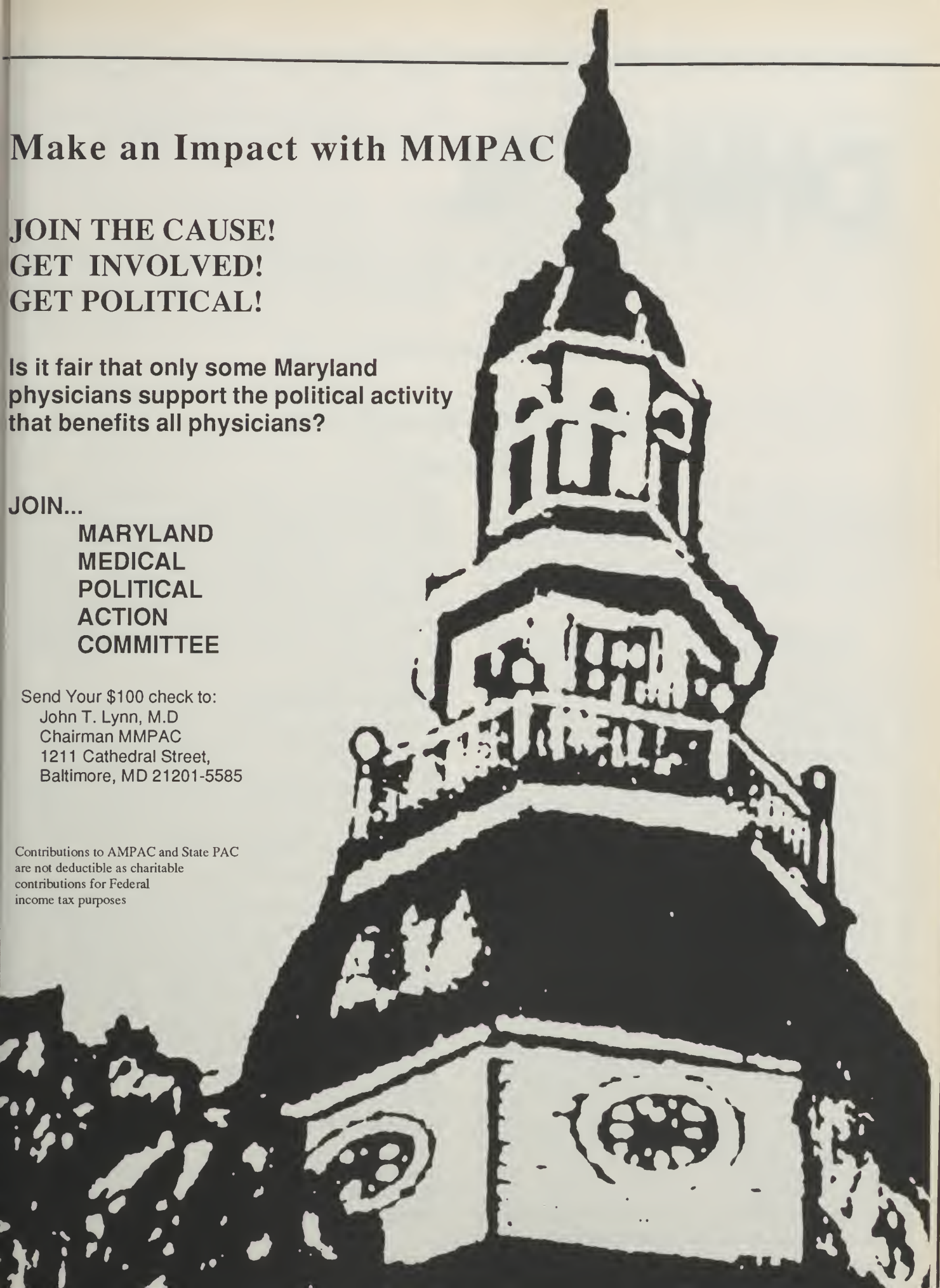
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201 W. Preston Street, Baltimore, Maryland 21201 (410)225-6700

Animal Rabies in Maryland in 1992

May, 1993

In 1992 laboratory confirmed animal rabies in Maryland decreased by 4.5% following 3 consecutive years of increase (Table 1). There were 26 fewer cases in 1992 (553) than in 1991 (579). The trend of animal rabies in Maryland in the past 13 years is shown in Figure 1.

Dorchester and Wicomico counties on the lower Eastern Shore became the 21st and 22nd jurisdictions to become involved in the current rabies epizootic of terrestrial animals (e.g., animals other than bats). Dorchester County reported 55 animal rabies cases since the initial case occurred in May, and Wicomico County reported 33 cases between June and the end of 1992.

The first rabid animal reported in each county was a raccoon. Reported cases in Dorchester County included 44 (80%) raccoons, 10 (18%) skunks, and one bat. Wicomico County recorded 23 (70%) raccoons and 10 (30%) skunks.

Talbot County, which was the only county newly involved in 1991, reported 54 cases in 1991 and 63 cases in 1992. A tendency for the largest number of rabies cases to be recorded in the first full calendar year of involvement has been observed in other jurisdictions. Frederick County, recorded a third cyclic peak of 79 rabid raccoons in 1992, which was eight years following an initial peak of 247 cases in 1984 and 66 cases in a second peak in 1988. Cyclic peaks usually occur at 4 to 6 year intervals in Maryland's jurisdictions although exceptions are seen. When the total number of cases is small year after year, expected fluctuations are difficult to recognize. Therefore, it is not always possible to clearly identify subsequent cyclic peaks.

Data Collection

Rabid animal cases are laboratory reported rabid by the direct immunofluorescent antibody (also known as DFA or fluorescent antibody test, or FAT) staining of brain material submitted to the Maryland Department of Health and Mental Hygiene and Maryland Agriculture Department laboratories and the Army Medical Laboratory at Ft. Meade. Many rabid animals go untested or undetected. Therefore, the cases reported are a crude indication of the prevalence of the disease and do not indicate the extent of viral infection within wild animal populations.

Rabies in Wild Animals

Wild animals accounted for 95.5% of all reported cases of animal rabies in 1992. The 527 cases represented a 5.7% decrease as compared to the 559 cases in 1991. Raccoons continue to be the most frequently reported rabid animal (74.7% of all animal cases [553] during 1992), followed by skunks (11.8%), foxes (4.9%), bats (3.1%), and groundhogs (1.1%).

Rabies in Domestic Animals

Of all rabid animals reported in Maryland, 25 domestic animals accounted for only 4.5% of the total. The cases represented an increase from the 18 (3.1%) 1991 domestic cases. Cats continue to be the most frequently reported domestic animal with rabies. Twenty-two cats (3.9% of all animal cases) is the largest number of rabid cats ever reported and this is an increase over 15 (2.6%) rabid cats in 1991. There were 2 (0.4%) rabid dogs reported, the same as in 1991. One horse was reported rabid in 1992 and 1 in 1991.

Seasonal Trends

A number of factors must be considered when evaluating seasonal trends in the number of reported cases of rabies in animals. First, rabies surveillance is largely passive and tested animals have usually behaved

in a manner that is unusual for the species. Second, seasons when human outdoor activity is greatest (e.g., summer) allow the greatest opportunities for contact with potentially rabid animals. Finally, surveillance varies for various reasons ranging from economic to political.

Raccoons and skunks have broadly similar distributions, with major peaks of reporting during the late winter-early spring (March-May) and again in the fall (October). A minor third peak often is apparent in late summer but is largely static over the summer and is lowest in January and February. Reports of rabid bats peak in summer and early fall (July to October).

Human Rabies

No human rabies has occurred in Maryland throughout the raccoon rabies epizootic which began in 1981. The most recent human rabies death resulted from a bat bite in 1976. In 1945, a human rabies death resulted from an exposure to a dog during a period in history when human rabies deaths were more common in the United States and usually the result of dog exposures.

Human Rabies Imported into France

Reference: CDC. MMWR. 1992:41: 953-4.

On May 9, 1992 a 3-year old boy who lived in Algeria died of rabies encephalitis in Paris. On March 17 the boy was chased by a dog in his village, fell and sustained a wound on his forehead. Witnesses confirmed that the wound resulted from his fall and that he was not bitten or licked by the dog. No treatment was started. The boy remained well until April 15 when he complained of headache and was hospitalized in Algeria on April 19 with agitation, hyperthermia, aerophobia and hydrophobia. On April 23 the boy was transferred to an intensive care unit in a hospital in Paris with suspected viral encephalitis of unknown origin.

Tests for rabies antibody in serum and cerebrospinal fluid (CSF) on April 24 were negative. On April 30 he became comatose and was placed under respiratory monitoring. He received external cardiac pacing after atrioventricular dissociation. Daily electroencephalographic monitoring showed decreasing brain activity. He died on May 9, 25 days after onset of symptoms and 17 days in the intensive care unit.

A second serum sample obtained on May 5 was positive for rabies antibody and the antibody titer increased daily until death on May 9. Neck skin biopsies and corneal smears performed on May 5 and 9 were negative by fluorescent antibody test (FAT). CSF samples obtained on April 24 and 27 and on May 5 and 9 were negative for rabies antigen detection by rapid rabies enzyme immunodiagnosis (RREID) test. However, the CSF sample obtained on May 9 was positive for rabies antibody. Saliva samples were obtained daily from May 5 through 9. The samples of May 7 and 9 were positive by RREID on cell sediment. Complete autopsy was not authorized by the family but a postmortem retro-orbital brain sample confirmed rabies diagnosis by FAT, isolation on neuroblastoma cells, RREID, and mouse inoculation test.

Postexposure rabies prophylaxis was administered to 143 hospital staff and family members in Paris. The exact data about the numbers of persons given rabies treatment in Algeria are not available.

Investigations in the boy's hometown revealed that the dog that chased him in March did not remain healthy, as reported to the family, but died (or was killed) shortly after the incident.

Note: Although rabies has been enzootic in red fox in France since 1968, human rabies is rarely acquired in that country. Northern Africa accounts for most cases imported into France and in every case the vector animal was a dog. Worldwide, dogs are responsible for more than 90% of human cases. In this case, no dog bite was documented but the putative short incubation period (29 days) is consistent with an exposure to the upper body. The boy might have received other unreported bites or exposures to rabies virus.

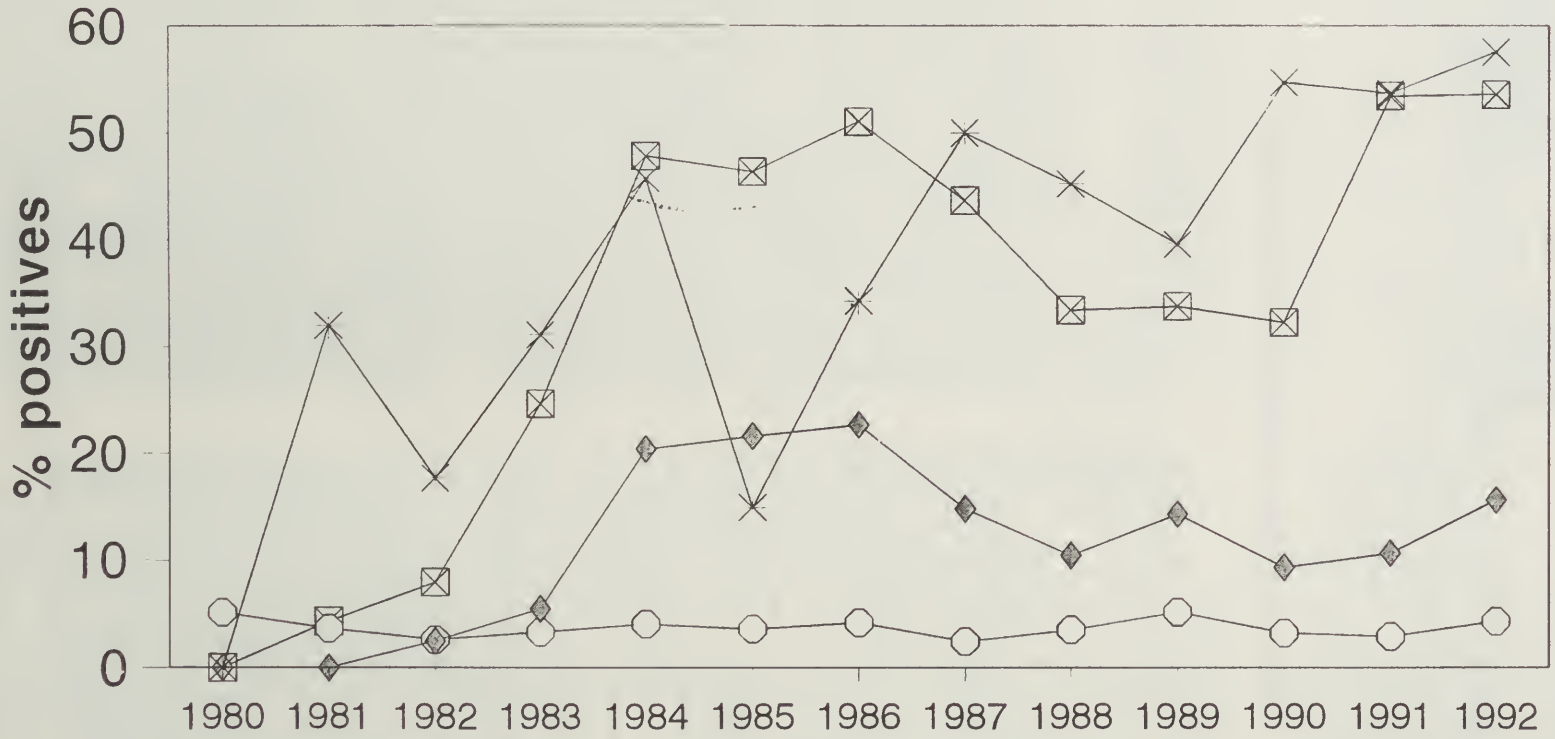
The early manifestations of rabies are usually nonspecific and can be difficult to differentiate from other encephalitic diseases. There are two distinct presentations: the most common furious form, characterized by hydrophobia, aerophobia, or episodic agitation and anxiety; or the least common paralytic form. Rabies should be considered in any patient with rapidly progressive encephalitis of unknown etiology.

Rabies postexposure prophylaxis is recommended for all persons bitten or scratched by animals that may be rabid. Rabies rarely results from exposures other than bites, scratches, or contact with mucous membrane or an open wound with infective saliva when bite or mucous membrane exposure cannot be excluded, postexposure treatment should be given to persons who have had physical contact with rabid animals. Treatment should be initiated as soon as possible after bites or scratches by known or suspected rabid animals. Immediate and thorough washing of all bite wounds and scratches with soap and water is an important measure for preventing rabies.

Exposure to humans with rabies has not been implicated as a means of rabies transmission except following cornea transplant from donors who died of rabies. Casual contact with a person with rabies (i.e., touching the patient) or contact with noninfectious fluids or tissues (e.g., blood, urine, feces) does not constitute an exposure and is not an indication for prophylaxis.

Figure 1. Animal Rabies in Maryland 1980-1992

Percent Positive of Examinations for Selected Species



Sku %	0	32	18	31	46	15	34	50	45	40	55	54	58
Fox %	0	0	3	5	20	22	23	15	11	14	9	11	16
Bat %	5	4	3	3	4	4	4	2	4	5	3	3	4
Rac %	0	4	8	25	48	46	51	44	33	34	32	53	54

Years

Table 1. 1992 ANNUAL REPORT OF LABORATORY CONFIRMED CASES OF RABIES - MARYLAND

Jurisdiction	Dogs		Cats		Cattle		Oth.domest.		Skunks		Foxes		Bats		Raccoons		Rodent/Lago		Other wild		Total		Percent
	Pos	Ex	Pos	Ex	Pos	Ex	Pos	Ex	Pos	Ex	Pos	Ex	Pos	Ex	Pos	Ex	Pos	Ex	Pos	Ex	Pos	Ex	Pos
Balto. City	0	74	0	120	0	0	0	10	0	0	0	5	5	164	5	46	0	18	0	29	10	466	2.15
Allegany	0	16	1	20	0	0	0	0	5	7	0	6	0	11	6	14	0	15	0	6	12	95	12.63
Anne Arundel	0	76	0	128	0	2	0	2	3	4	3	24	2	35	7	39	0	88	0	29	15	427	3.51
Baltimore	0	153	3	275	0	0	0	0	0	2	4	16	1	23	22	50	1	81	0	12	31	612	5.07
Calvert	0	9	0	26	0	0	0	1	1	1	2	11	1	4	2	3	0	14	0	7	6	76	7.89
Caroline	0	10	3	39	0	1	0	1	5	5	2	4	0	3	29	38	1	15	0	4	40	120	33.33
Carroll	1	11	2	86	0	1	0	1	1	2	0	4	1	8	9	16	2	24	0	2	16	155	10.32
Cecil	0	15	0	57	0	0	0	1	0	1	1	3	0	10	14	18	0	11	0	4	15	120	12.50
Charles	1	12	1	21	0	0	0	0	1	1	1	3	0	0	7	8	0	18	0	10	11	73	15.07
Dorchester	0	12	0	33	0	0	0	0	10	11	0	0	1	7	44	60	0	4	0	7	55	134	41.04
Frederick	0	81	3	221	0	35	0	17	9	20	2	17	1	19	64	99	0	57	0	14	79	580	13.62
Garrett	0	5	0	10	0	4	0	1	2	8	0	6	0	3	8	46	0	15	0	4	10	102	9.80
Harford	0	21	1	89	0	0	0	2	0	0	1	6	3	23	19	35	0	38	0	8	24	222	10.81
Howard	0	12	1	67	0	0	0	1	1	2	2	13	0	12	9	25	1	57	0	2	14	191	7.33
Kent	0	6	0	6	0	0	0	0	0	0	0	1	0	3	2	4	0	2	0	0	2	22	9.09
Montgomery	0	95	1	223	0	2	1	2	2	7	4	25	1	29	22	50	0	165	0	58	31	656	4.73
Pr.George's	0	52	0	93	0	3	0	6	1	2	3	14	1	18	21	48	0	66	0	37	26	339	7.67
Queen Anne's	0	14	0	27	0	1	0	1	2	2	0	1	0	2	29	39	0	17	0	1	31	105	29.52
St. Mary's	0	11	0	21	0	2	0	1	0	1	0	4	0	2	2	9	0	4	0	2	2	57	3.51
Somerset	0	2	0	6	0	1	0	0	0	1	0	0	0	0	0	2	0	0	0	5	0	17	0.00
Talbot	0	12	2	49	0	0	0	1	3	4	1	2	0	2	57	64	0	17	0	2	63	153	41.18
Washington	0	28	4	49	0	1	0	0	9	15	1	6	0	10	12	19	1	24	0	3	27	155	17.42
Wicomico	0	25	0	80	0	2	0	4	10	17	0	1	0	2	23	35	0	17	0	13	33	196	16.84
Worcester	0	2	0	16	0	1	0	1	0	0	0	0	0	2	0	4	0	3	0	4	0	33	0.00
Total	2	754	22	1,762	0	56	1	53	65	113	27	172	17	392	413	771	6	770	0	263	553	5,106	10.83

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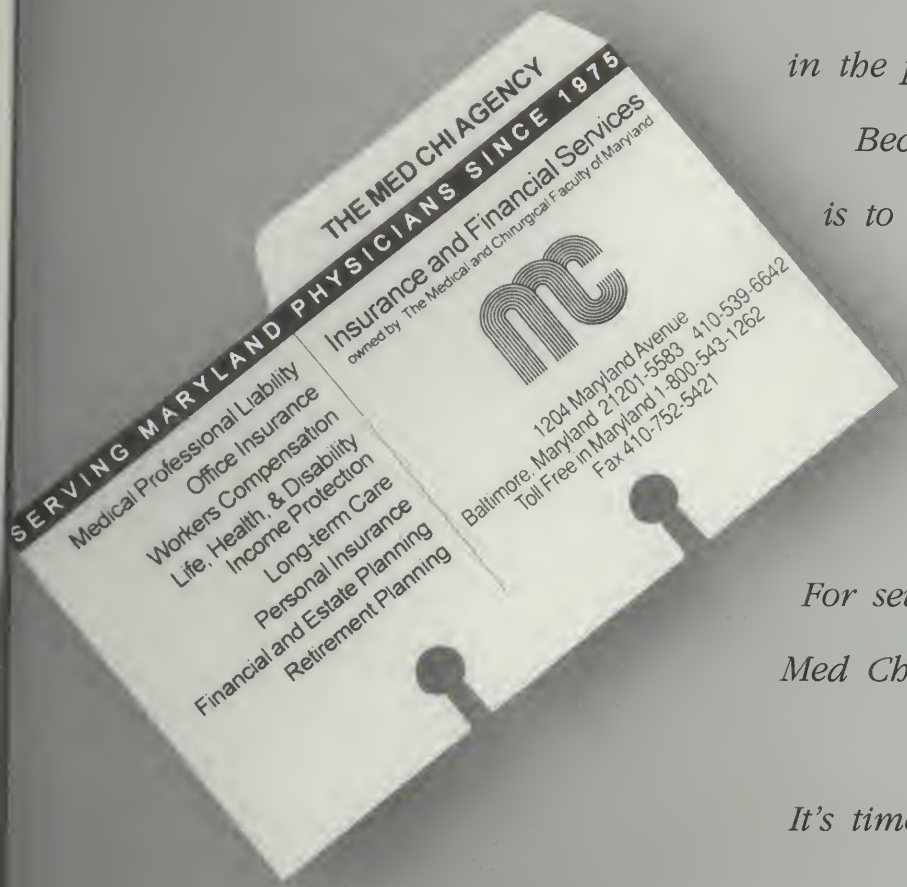
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HBP in the elderly

Neuropsychiatry for HIV patients

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Maryland Medical Journal

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Upcoming special issues of the Maryland Medical Journal *will focus on the 200th anniversary of the Baltimore City Health Department, alcohol and drugs, Church Hospital, Suburban Hospital, long-term care, and Maryland General Hospital.*

Cover photo: Pietr Hitzig, M.D., took this photograph of Japanese anemone in front of ilex verticillata at his home in Baltimore County.

Cover design: Virginia Carter

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Baltimore Convention Center

This 200th Anniversary conference is designed to celebrate the creation of the first legally mandated public health department in the continental United States. The Baltimore City Health Department is hosting this two day colloquium to recognize the pioneering efforts of private and public health care professionals who established innovative programs. During this two day presentation, programs designed to meet current public health problems and to consider proposed solutions will be discussed. Each of the planned presentations will emphasize the need for health promotion and disease prevention for all citizens. Principal areas to be stressed are: Child Health, Dental Health, Family Health, Environmental Health, Geriatric Health, Nursing, Preventive Medicine and Epidemiology, Psychological Health, and Women's Health Care.

C.M.E. and C.E.U. credits will be provided.

Distinguished speakers have been selected from universities, hospitals, private and public health care organizations as well as private sector businesses throughout the United States.

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A program agenda will be mailed.
Registration deadline is August 1, 1993

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Chief Executive Officer's Newsletter

June 1993

Donald "Ted" Lewers, M.D., Elected to AMA Board of Trustees

Donald "Ted" Lewers, M.D., a nephrologist and internist from Easton, Maryland, was elected to the American Medical Association (AMA) Board of Trustees on June 16, 1993. Dr. Lewers is the first Maryland physician to be elected to this board. He is a past Med Chi president and has been a member of the AMA House of Delegates since 1984.

President of the Kanagawa Prefectural Medical Association Visits AMA Annual Meeting

During the recent AMA 1993 annual meeting in Chicago, the Maryland Delegation to the AMA was pleased to welcome and introduce Ryohei Kawaguchi, M.D., president of the Kanagawa Prefectural Medical Association. Dr. Kawaguchi attended several meetings in Chicago and was introduced during the opening of the AMA House of Delegates. Hiroshi Nakazawa, M.D., Med Chi Public Relations Committee chairperson, was instrumental in coordinating the visit by the president of Med Chi's sister state medical association.

Reimbursement of Legal Fees

Medical Mutual Liability Insurance Society of Maryland offers a coverage (Med Guard) to its policyholders that pays for legal fees to defend a physician in disciplinary proceedings involving

- Hospital, HMO/PPO peer review
- Local and state society peer review
- State licensure and disciplinary boards
- National Practitioner Data Bank
- PROs (professional review organizations)
- OBRA (Omnibus Budget Reconciliation Act)

Med Guard can be obtained for the individual physician or purchased by a professional organization to provide coverage for each employed physician, certified registered nurse anesthetist (CRNA), or physician assistant. Rates are governed by the limit of defense coverage selected on an individual basis or professional organization classification and generally range from $600 to $800 annually.

For more information regarding Med Guard coverage with Medical Mutual Liability Insurance Society of Maryland, you may contact the company directly or the Med Chi Agency at 410-539-6642 or 800-543-1262.

Medicare Co-Payments/ Deductibles

The amount that must be paid before Medicare will pay for any items or services for an individual is the Medicare deductible. The co-payment or coinsurance is the portion of the cost of an item or service that the Medicare beneficiary has the responsibility to pay. Routine waiver of co-payments or deductibles misrepresents the actual charge made, is unlawful, and a provider or supplier could be held liable for submitting a false claim or for violating the Medicare anti-kickback statute.

An exception to this prohibition against waiving co-payments and deductibles is when there is special consideration because of a particular patient's hardship. In this type of situation, documentation should show a good faith effort to collect the money and the reason why the payment had to be waived.

AMA, FBI Targeting Health Care Fraud

The AMA and FBI (Federal Bureau of Investigation) are working together to uncover health care fraud, and the AMA has established a fraud hotline (1-800-262-3211) that physicians or health care workers can call to report incidents of fraud. Information obtained from the hotline reports are passed on to the FBI.

HCFA Consultation Policy Reversed

Effective for dates of service June 28, 1993, and after, Medicare will no longer deny consultations billed by a provider who has seen the patient within the previous three years.

Physicians who perform pre-operative consultation for an established patient at the request of a surgeon may bill the appropriate consultation code using the current CPT (current procedural terminology) definition of consultation.

Thank you to the physicians who supported AMA and Med Chi efforts to change Health Care Financing Administration (HCFA) policy concerning nonpayment for consultations to established patients.

Medicare Clarification—Locum Tenens Situations

For the remainder of 1993, the patient's regular physician may continue to bill for services provided by a substitute physician if

- the substitute physician is paid by the regular physician on a per diem or fee-for-time basis;
- the period of locum tenens coverage does not exceed 60 consecutive days;
- the procedure codes for services by the substitute physician are modified with Q6; and
- a record is kept of the services performed by a substitute physician and is associated with the substitute physician's universal physician identification number (UPIN). (The UPIN does not have to be put on the claim form at this time.)

Medicare Fraud Alerts

The first two Medicare Fraud Alerts prepared by Medicare contractor fraud and abuse personnel and investigators from the Office of the Inspector General follow this newsletter. These alerts are being provided to inform health care providers of Medicare schemes and issues suggestive of fraud and abuse. Please review the alerts and detach for your records those alerts that pertain to your practice.

Universal Precautions Sign

According to Maryland law (*Maryland Health Occupations Code Annotated* §14-415), if a physician is engaged in the private practice of medicine, the physician shall conspicuously display a universal precautions sign in the office where the physician is engaged in practice.

The sign, which **must** immediately be displayed in all physician offices, follows this CEO's newsletter. Please place it in a conspicuous place where patients can see and read it.

1993 Med Chi Semiannual Meeting

Get in the swim and come to the Med Chi semiannual meeting being held Friday, September 10, 1993, through Sunday, September 12, 1993, at the Sheraton Ocean City Resort and Conference Center.

Med Chi has reserved a block of rooms at a special group rate of $110.00 per night for a single/double occupany room (tax and incidentals not included). To reserve a room, call the Sheraton at 1-800-638-2100 and tell them you will be attending the Med Chi meeting. Bring the family and enjoy the water! Registration form and tentative agenda follow this newsletter.

President's Regional Conferences

Med Chi has set dates for two president's regional conferences this fall:

- Eastern Shore — Tuesday, October 19, 1993, at the Cambridge Yacht Club in Cambridge, Maryland
- Western Maryland — Thursday, November 11, 1993, at the Sheraton in Hagerstown, Maryland

Med Chi is currently surveying area physicians to determine subjects of local concern and topics for a continuing medical education presentation at the meetings. Physicians are strongly encouraged to complete these needs assessments and attend their regional meeting. For questions regarding the president's regional conferences, contact Joan Mannion at 410-539-0872 or 1-800-492-1056.

Advance Directives

The Patient Self-Determination Act, a federal law that applies to hospitals, nursing homes, home health care agencies, and hospices certified by Medicare or Medicaid, requires that adult patients be advised of their right to accept or refuse medical care and their right to execute an advance directive. In addition, managed care organizations must provide this information to new adult enrollees.

Two brochures, a physician brochure and a patient brochure, have been developed by the AMA to help both groups understand advance directives. To order these brochures, call the AMA Customer Service toll-free number, 1-800-621-8335.

Baltimore City Medical Society Awards Scholarships

The Baltimore City Medical Society Foundation awarded $15,750 in scholarships to five Baltimore City medical school students and one student from Baltimore County. The scholarships were supported by contributions from individual physician members of the Baltimore City Medical Society (BCMS) and their friends and families, the BCMS Auxiliary, and the medical staffs of Bon Secours, Liberty, and Sinai hospitals. The primary goal of the program is to support city medical school students and encourage them to return to Baltimore to practice medicine.

Journals Needed

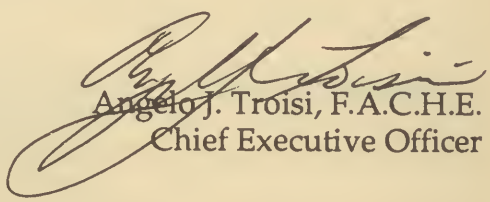
Volume 27 of the *Maryland State Medical Journal* is missing from the Med Chi library. If you have journal copies from 1978 that you would be willing to donate to the library, please call Margaret Burri at 410-539-0872 or 1-800-492-1056.

Physicians Needed for Radio Program

Consultation, a weekly radio program sponsored by Med Chi, allows physicians to appear on WBAL-AM radio to discuss the latest developments in medicine and to answer questions about current health issues. Med Chi currently airs the one-on-one talk show, with host John Stupak, on Sunday mornings at 9:30 a.m. Interested physicians should contact Lori Robinson at 410-539-0872 or 1-800-492-1056.

Calling All Medical Musicians

VA-National Medical Musical Group (VA-NMMG) is recruiting new members for its chorus and symphony orchestra. If you are a good singer or play a musical instrument well, and you are a physician, nurse, student, or other medical professional, you may apply. The VA-NMMG program is slated to perform on November 10, 1993, at DAR Constitution Hall in Washington, DC. The group will then conduct a concert tour of England and Wales, November 11–19. For information on auditions or travel to Great Britain (nonperformers may travel as companions), call Mrs. Nevart Haley at 202-667-3879.



Angelo J. Troisi, F.A.C.H.E.
Chief Executive Officer

MEDICARE FRAUD ALERT

BLUE CROSS BLUE SHIELD OF MARYLAND, MEDICARE DIVISION

FRAUD ALERT # 1993-N1
MAY 12, 1993

FALSE CLAIMS FOR LABORATORY SERVICES

A large, interstate, clinical laboratory recently entered into a settlement with a U.S. Attorney to repay more than $110 million to the Medicare and Medicaid programs for submitting false claims and pleaded guilty to criminal charges. The scheme resulted in physicians ordering medically unnecessary services, and involved Sequential Multi-Analysis Computer (SMAC) tests, (CPT codes 80002 - 80019), HDL-cholesterol tests (CPT codes 83718), LDL tests, (CPT code 83710), Lipid profile (CPT code 80061), total cholesterol tests (CPT code 82465), and serum ferritin tests (CPT code 82728).

The scheme was as follows. When a physician ordered a SMAC, the laboratory would also perform, and bill the physician a nominal amount for, the HDL-cholesterol test. If the physician objected, the additional charge would be dropped. New physician clients were told the test was free. The laboratory did not inform the physicians that it was billing insurers, such as Medicare, for the test ($18 for SMAC, $16 for HDL-cholesterol). The laboratory subsequently revised its pre-printed test ordering form, changing the item, SMAC, to Health Survey Profile. Health Survey Profile consisted of both SMAC and the HDL-cholesterol test. Thus, whether the HDL-cholesterol test was medically necessary or not, the physician was induced to order it.

Subsequently, the laboratory added the serum ferritin test to its Health Survey Profile (at an additional charge to insurers of $16). Again there was a nominal additional charge to physician clients that was waived if the physician objected.

In 1986, Medicare paid the laboratory about $500,000 exclusively for the serum ferritin test. By 1990, medicare was paying the laboratory $31 million exclusively for the ferritin test.

For further information call Don Nicholson at (410) 561-7976.

This Alert is provided for educational and information purposes only. It is intended to assist interested parties in obtaining additional information concerning potential fraud and to alert affected parties to the nature of the suspected fraud. It is not intended to be used as the basis for the denial of any claims or any adverse action against any provider or supplier. Such decisions must be based on facts developed independent of this Alert. This Alert is not intended to indicate, suggest or imply that any particular individual or entity, or group of individuals or entities, are associated with the activity described herein.

MEDICARE FRAUD ALERT

BLUE CROSS BLUE SHIELD OF MARYLAND, MEDICARE DIVISION

FRAUD ALERT # 1993-N2
MAY 12, 1993

FALSE CLAIMS FOR LUMISCOPES

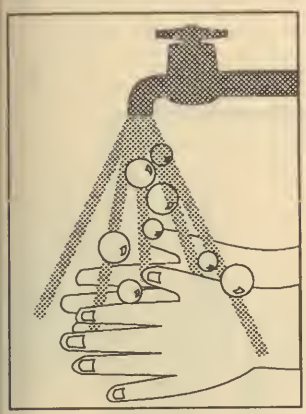
The Medicare Contractor for California reports having received claims for "lumiscopes" billed as "a heat lamp, without stand (table model), includes bulb, or infra red element." The determination has been made that this product which contains a 7.5 watt bulb does not meet the definition of Durable Medical Equipment (DME) for purpose of Medicare coverage and will not be reimbursed. Misrepresenting lumiscopes as infra red heat lamps on Medicare claims may constitute program fraud.

For further information call Don Nicholson at (410) 561-7976.

This Alert is provided for educational and information purposes only. It is intended to assist interested parties in obtaining additional information concerning potential fraud and to alert affected parties to the nature of the suspected fraud. It is not intended to be used as the basis for the denial of any claims or any adverse action against any provider or supplier. Such decisions must be based on facts developed independent of this Alert. This Alert is not intended to indicate, suggest or imply that any particular individual or entity, or group of individuals or entities, are associated with the activity described herein.

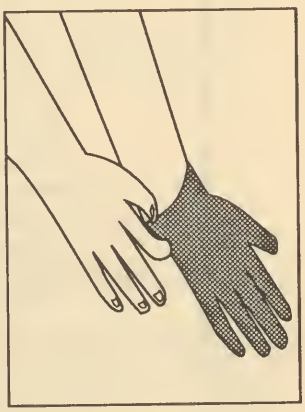
We Take Precautions for You

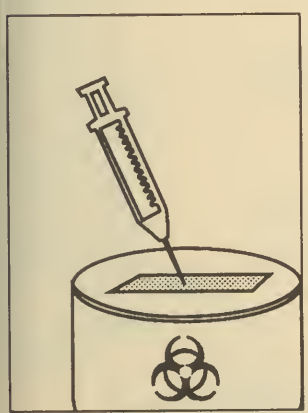
Because you, our patients, are important to us, we are taking special steps to protect you and your health. These steps include:



Washing our hands
before and after
patient care

Putting on gloves
when contact with blood
and/or bloody fluids
is likely to occur





Disposing of used needles and sharp objects
by placing them
in a puncture proof
container

Putting on a mask, eye protection, and a gown
if splash or splatter
of blood or bloody
fluids is likely to occur





Cleaning our surroundings and equipment
by using disinfectants

If you don't think all of these precautions are being taken, talk with your health care provider, or you may contact the State Board of Physician Quality Assurance at 410-764-4777.

DHMH 4472 (1-93)

Universal Precautions Sign

According to Maryland law (*Maryland Health Occupations Code Annotated* §14-415), if a physician is engaged in the private practice of medicine, the physician shall conspicuously display a universal precautions sign in the office where the physician is engaged in practice.

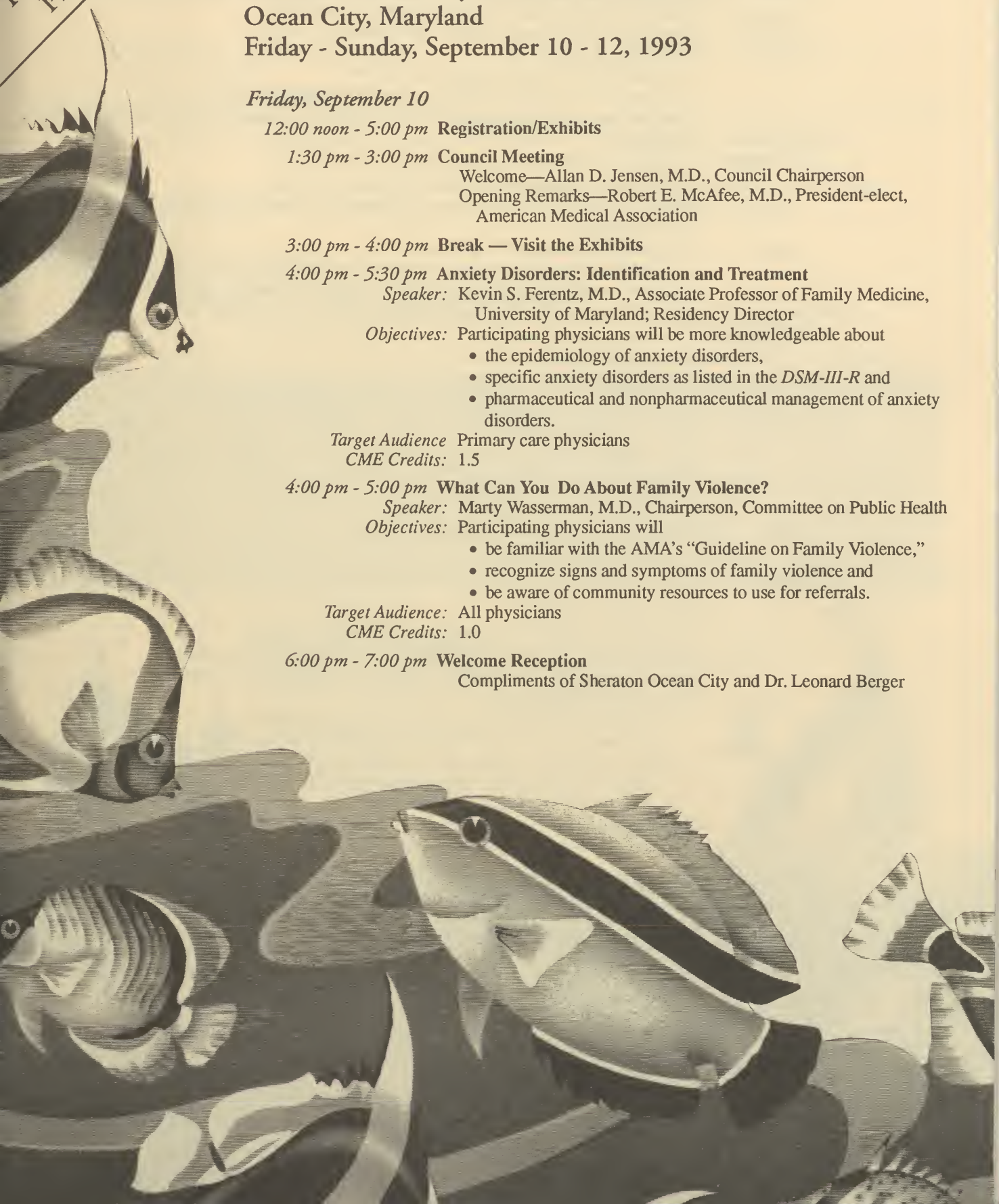
The sign must immediately be displayed in all physician offices. Please place it in a conspicuous place where patients can see and read it.

The sign on the reverse side of the page is provided to you courtesy of the Medical and Chirurgical Faculty of Maryland, 410-539-0872.

PRELIMINARY PROGRAM

1993 Semiannual Meeting of the Medical and Chirurgical Faculty of Maryland

at the Sheraton Ocean City Resort and Conference Center
Ocean City, Maryland
Friday - Sunday, September 10 - 12, 1993



Friday, September 10

12:00 noon - 5:00 pm **Registration/Exhibits**

1:30 pm - 3:00 pm **Council Meeting**
Welcome—Allan D. Jensen, M.D., Council Chairperson
Opening Remarks—Robert E. McAfee, M.D., President-elect, American Medical Association

3:00 pm - 4:00 pm **Break — Visit the Exhibits**

4:00 pm - 5:30 pm **Anxiety Disorders: Identification and Treatment**
Speaker: Kevin S. Ferentz, M.D., Associate Professor of Family Medicine, University of Maryland; Residency Director
Objectives: Participating physicians will be more knowledgeable about
- the epidemiology of anxiety disorders,
- specific anxiety disorders as listed in the *DSM-III-R* and
- pharmaceutical and nonpharmaceutical management of anxiety disorders.

Target Audience Primary care physicians
CME Credits: 1.5

4:00 pm - 5:00 pm **What Can You Do About Family Violence?**
Speaker: Marty Wasserman, M.D., Chairperson, Committee on Public Health
Objectives: Participating physicians will
- be familiar with the AMA's "Guideline on Family Violence,"
- recognize signs and symptoms of family violence and
- be aware of community resources to use for referrals.

Target Audience: All physicians
CME Credits: 1.0

6:00 pm - 7:00 pm **Welcome Reception**
Compliments of Sheraton Ocean City and Dr. Leonard Berger

Saturday, September 11

7:15 am - 5:00 pm **Registration /Exhibits**

7:30 am - 9:30 am **Medicine on Trial: An Interactive Risk Management Program for Physicians**

Medical Mutual Liability Insurance Society of Maryland (Med Mutual will give a 5% premium discount on 1994 individual liability renewal policies to its members who attend this program. To receive the premium discount, there is a $40 program fee.)

Speakers: Thomas G. Chiccone, M.D., Capital Emergency Associates
Beth Petree, Claims Representative, Med Mutual

Objectives: Participating physicians will

- be able to identify pertinent patient care issues,
- increase their knowledge of diagnostic and therapeutic modalities,
- understand a medical malpractice claim and become more aware of risk management skills.

Target Audience: All physicians
CME Credits: 2.0

8:00 am - 9:30 am **Step-by-Step: Documenting Your CME Program**

Speakers: William L. Thomas, M.D., Chairperson, Committee on Continuing Medical Education Review and invited panel

Objectives: Participating physicians will better understand

- what documentation is necessary to demonstrate compliance with the seven "Essentials" and
- how to document compliance with the "Standards for Commercial Support of CME."

Target Audience: All physicians involved with the planning of continuing medical education
CME Credits: 1.5

9:30 am - 10:00 am **Break—Visit the Exhibits**

10:00 am - 12:00 noon **Plenary Session—Health Systems Reform: The Effect on Patient Care**

Speakers: Robert E. McAfee, M.D., President-elect, American Medical Association
Robert Pulliam, M.D., President, West Virginia Medical Society
The Honorable Casper R. Taylor, Jr., Chairperson, House Economic Matters Committee, Maryland House of Delegates
The Honorable Gary R. Alexander, Vice Chairperson, House Economic Matters Committee, Maryland House of Delegates

Objective: Participating physicians will be informed about the most recent developments in health systems reform.
CME Credits: 2.0

12:00 noon - 12:30 pm **Break—Visit the Exhibits**

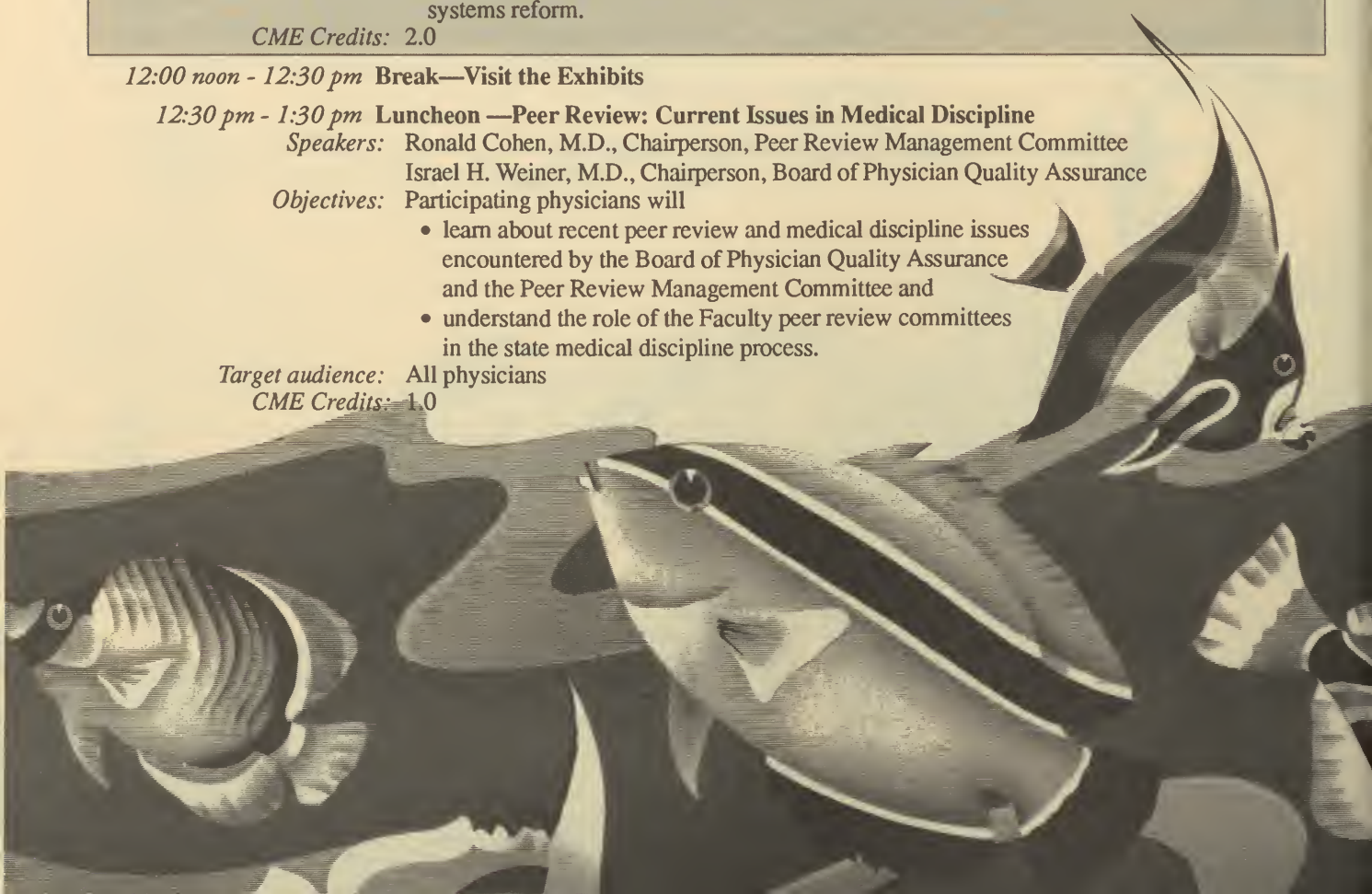
12:30 pm - 1:30 pm **Luncheon —Peer Review: Current Issues in Medical Discipline**

Speakers: Ronald Cohen, M.D., Chairperson, Peer Review Management Committee
Israel H. Weiner, M.D., Chairperson, Board of Physician Quality Assurance

Objectives: Participating physicians will

- learn about recent peer review and medical discipline issues encountered by the Board of Physician Quality Assurance and the Peer Review Management Committee and
- understand the role of the Faculty peer review committees in the state medical discipline process.

Target audience: All physicians
CME Credits: 1.0



1:30 pm - 3:30 pm **House of Delegates Meeting**
Introductory Remarks—Joseph Snyder, M.D., President, Med Chi

3:30 pm - 4:30 pm **Break—Visit the Exhibits**

4:30 pm - 6:00 pm **It's Just Arthritis — Take Some Aspirin**
Speaker: Ira T. Fine, M.D., Chief, Division of Rheumatology, Sinai Hospital
Objectives: Participating physicians will be aware of
- the different types of arthritis,
- appropriate diagnostic approaches and appropriate therapeutic interventions.

Target Audience: Primary care physicians
CME Credits: 1.5

4:30 pm - 6:00 pm **Early Detection of Prostate Cancer**
Speaker: Stephen C. Jacobs, M.D., Professor of the Dept. of Urology, Univ. of Maryland School of Medicine
Objectives: Participating physicians will have a greater understanding of
- when to recommend the use of prostate-specific-antigen,
- guidelines for treating prostate disease and when to refer to a urologist.

Target Audience: Primary care physicians
CME Credits: 1.5

Sunday, September 12

7:30 am - 12:00 noon **Registration /Exhibits**

8:00 am - 9:00 am **Med Chi Insurance Agency Breakfast Seminar**
The Age Favored Retirement Plan: A New Concept for Qualified Retirement Planning
Speaker: Michael H. Korthaus, Pension Specialist, Safeco Life Insurance Company
Objectives: Discussion of qualifed retirement plans and the advantages of a new flexible concept that has become the answer for many professional practices where the owners and executives tend to be older and more highly compensated.
Target Audience: All physicians and spouses (LIMITED TO 50—PREREGISTRATION REQUIRED)

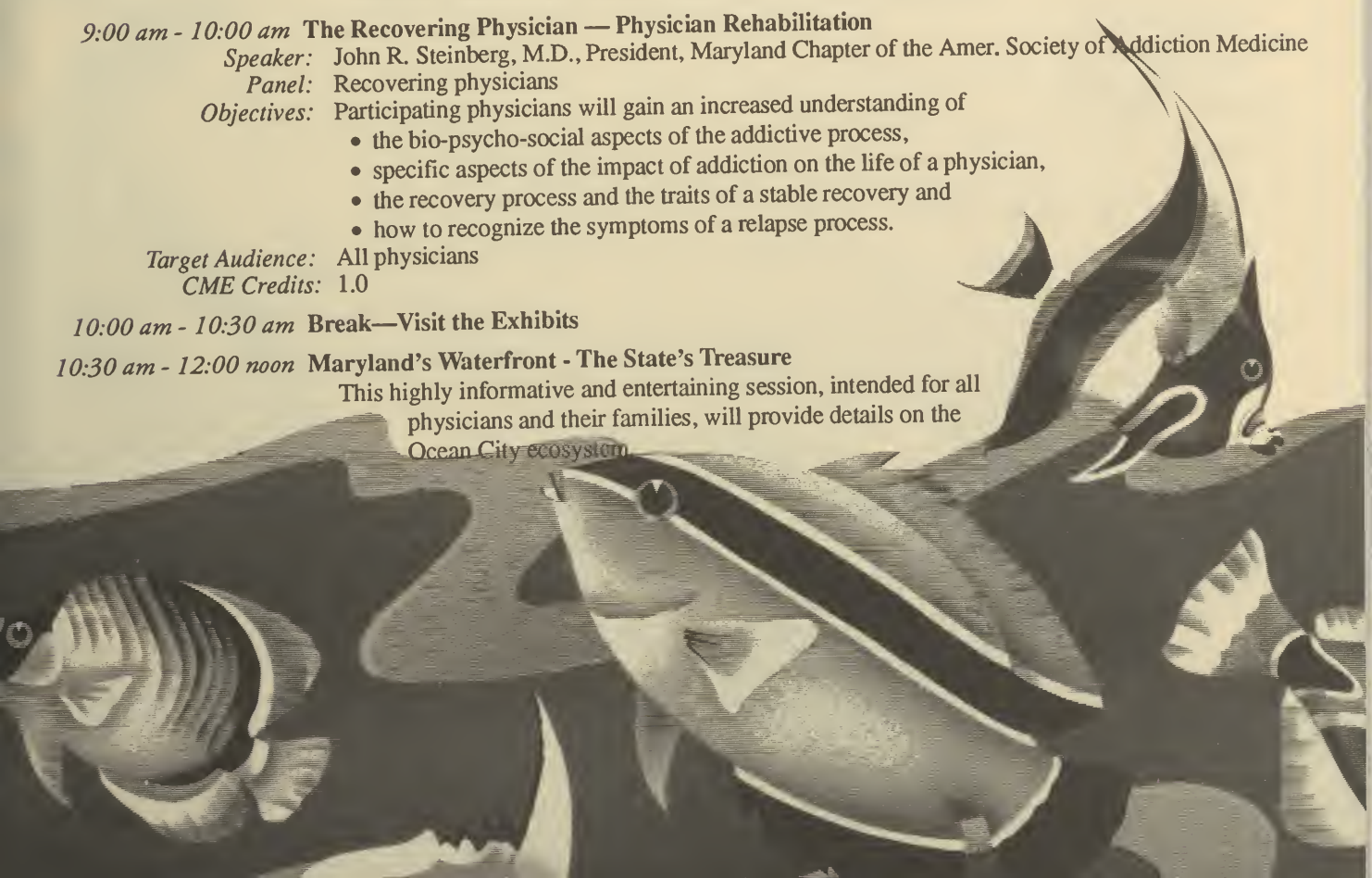
9:00 am - 10:00 am **Medicine in Maryland: The Practice and the Profession**
Speaker: Jane Elliott Sewell, Ph.D., History of Medicine Scholar
Dr. Sewell will discuss the diversity of practices, the evolution of medical education and governing institutions, medical milestones in Maryland and the way changing social, economic and cultural settings interacted with the medical arena.

9:00 am - 10:00 am **The Recovering Physician — Physician Rehabilitation**
Speaker: John R. Steinberg, M.D., President, Maryland Chapter of the Amer. Society of Addiction Medicine
Panel: Recovering physicians
Objectives: Participating physicians will gain an increased understanding of
- the bio-psycho-social aspects of the addictive process,
- specific aspects of the impact of addiction on the life of a physician,
- the recovery process and the traits of a stable recovery and
- how to recognize the symptoms of a relapse process.

Target Audience: All physicians
CME Credits: 1.0

10:00 am - 10:30 am **Break—Visit the Exhibits**

10:30 am - 12:00 noon **Maryland's Waterfront - The State's Treasure**
This highly informative and entertaining session, intended for all physicians and their families, will provide details on the Ocean City ecosystem.



Hotel Information

The Sheraton Ocean City Resort and Conference Center is located at 10100 Ocean Highway, Ocean City, Maryland.

Guest check-in time is 3:00 pm. Check-out time is 11:00 am. Requests for early check-ins and late check-outs will be honored on a space available basis only.

Reservations

Med Chi has reserved a block of rooms at a special group rate. To reserve your room, call 1-800-638-2100 and tell them you'll be attending the Med Chi Semiannual Meeting. To receive the Med Chi group rate, your reservations must be made by **August 24, 1993**.

Continuing Medical Education Credit

The Medical and Chirurgical Faculty of Maryland designates this continuing medical education activity for up to 13 hours in Category 1 of the Physician's Recognition Award of the American Medical Association. Physicians attending this year's meeting can earn up to a maximum of 9 CME credits.

The Medical and Chirurgical Faculty of Maryland is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor continuing medical education for physicians.

Registration Form
Medical and Chirurgical Faculty of Maryland
1993 Semiannual Meeting
Friday - Sunday, September 10 - 12, 1993
Sheraton Ocean City Resort and Conference Center

Check one: ☐ Med Chi member - no charge ☐ Nonmember - $35.00

Preregister: ☐ Med Chi Insurance Agency Breakfast (Sunday, 8:00 - 9:00 am)

Form of payment: ☐ Check (payable to Med Chi)
☐ MasterCard ☐ Visa

Credit Card No. _____ Exp. Date _____

Signature _____

Registrant information:

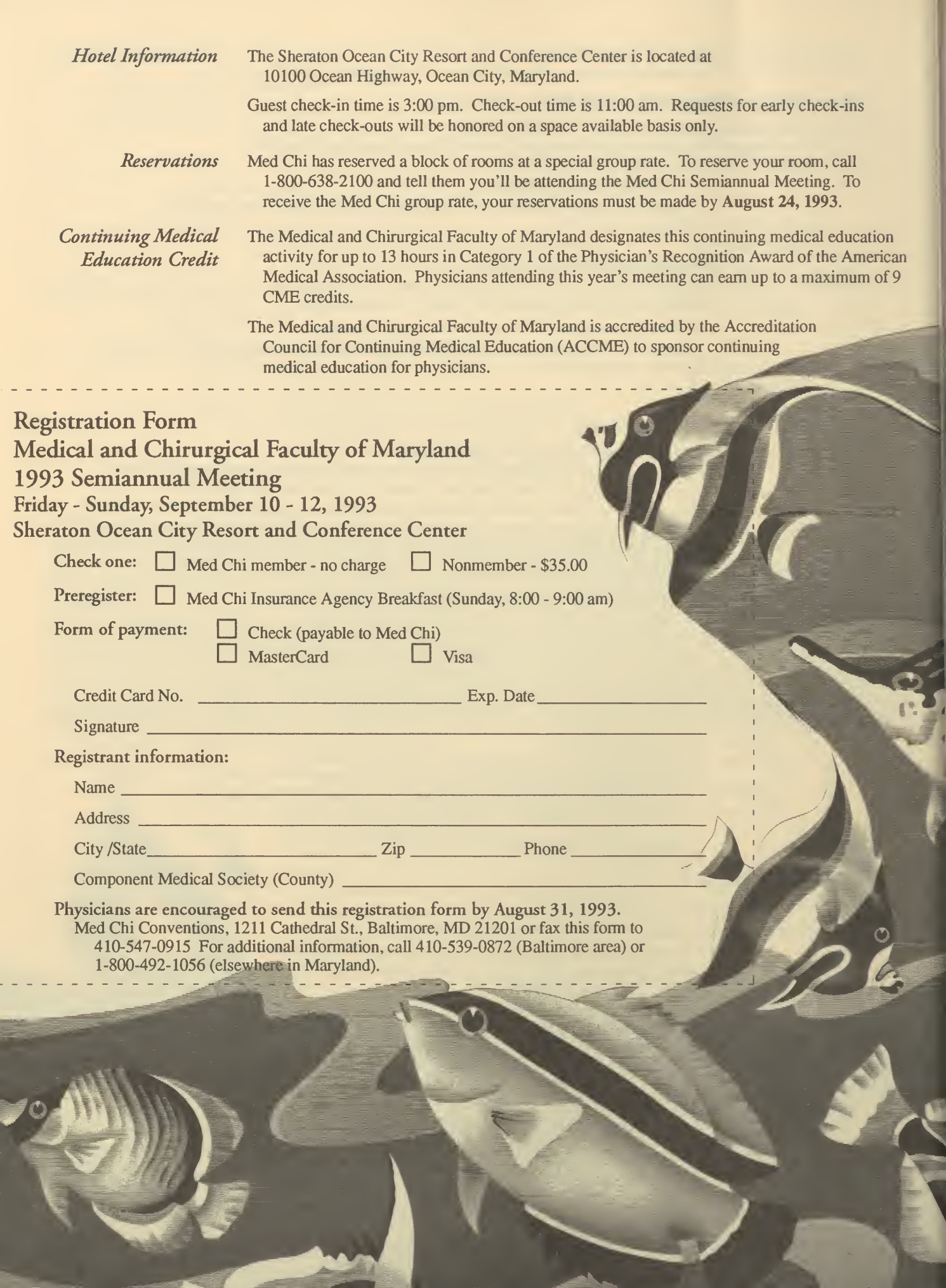
Name _____

Address _____

City /State _____ Zip _____ Phone _____

Component Medical Society (County) _____

Physicians are encouraged to send this registration form by August 31, 1993.
Med Chi Conventions, 1211 Cathedral St., Baltimore, MD 21201 or fax this form to 410-547-0915 For additional information, call 410-539-0872 (Baltimore area) or 1-800-492-1056 (elsewhere in Maryland).

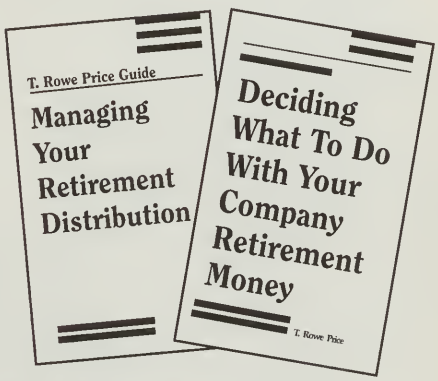


NEW ROLLOVER LAW FOR 1993

LEAVING YOUR JOB?
DON'T LEAVE 20% OF YOUR RETIREMENT MONEY BEHIND

FREE T. ROWE PRICE KIT HELPS YOU PROTECT YOUR RETIREMENT SAVINGS

If you're leaving your job, choosing what to do with your retirement plan payout may be one of the most important decisions you'll make. And a new law makes your choices more complicated—and more important—than ever. *Depending on your decision, the IRS could withhold 20% of your retirement money.*



We help you know *all* your options. Your retirement distribution could be a primary source of income in retirement. To help manage this money, request our free, up-to-date kit, *Managing Your Retirement Distribution*. It can help you understand **all** your options. In plain, straightforward language, we give you the information you need to decide what's best for you.

HOW THE NEW LAW AFFECTS YOU

As of January 1, 1993, you may *directly* roll over most qualified plan payouts from your previous plan to an IRA or new employer plan.

If you do not have the money directly rolled over, 20% of the total will automatically be withheld from your distribution.

If you receive the payout, you may still do a rollover, but you will have to make up the 20% out of your own pocket. Otherwise, the amount withheld will be subject to income taxes and, possibly, a penalty.

The T. Rowe Price advantage. If you decide to move your distribution to a T. Rowe Price IRA, we can help you invest it to meet your retirement goals. You'll have access to our complete family of mutual funds—**all 100% sales-commission-free**—which probably offers more investment choices than you had in your employer-sponsored plan. And our discount brokerage service lets you roll over securities you may receive as part of your distribution.

Our free *Direct Rollover Service* makes it easy. Simply fill out the application enclosed with your free kit to open your IRA. With our *Direct Rollover Service*, we will coordinate your request directly with your previous employer if you so choose.

Call 24 hours for more information and a free kit

1-800-541-8312

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Request a prospectus with more complete information, including management fees and other charges and expenses. Read it carefully before you invest or send money. T. Rowe Price Investment Services, Inc., Distributor, 100 E. Pratt Street, Baltimore, MD 21202.



WHEN YOU'RE TOPS IN YOUR FIELD, YOU DON'T HAVE TIME TO STOP AND HAVE YOUR PICTURE TAKEN.

Nationally recognized physicians–and the highly trained staff that supports them–are everywhere at The George Washington University Medical Center. Some are busy working in our cancer, neurological, emergency medicine, cardiovascular, or any of our other specialty areas. The rest can be found at our research and teaching facilities. But no matter where they are, each one brings a highly specialized skill to our interdisciplinary approach that combines the best possible human and technical resources available. The only place you won't find our staff is posing for pictures. Rest assured, their experience is worth a thousand words.

The George Washington University
WASHINGTON, DC
MEDICAL CENTER
800-333-GWMC

Our Pictures Are Worth A Thousand Words.

Case #24

Baseline mammogram in a 56 year old asymptomatic woman.

DIAGNOSIS: Invasive Ductal Carcinoma.

Over 180,000 women in the United States will develop breast cancer in 1993. Mammography is still the best way to detect small breast cancers that result in decreased mortality and can be treated with breast conservation therapy. However, mammography may be non-specific and with the increased utilization of screening, numerous non-palpable, indeterminate lesions are detected. Until recently, the only way to determine whether these lesions were benign or malignant was with needle-guided open surgical biopsy.

Stereotactic breast biopsies are now performed in an outpatient setting in our Pomona office. This device uses a computer to calculate the exact 3D position of a non-palpable lesion and directs a needle into the abnormality for tissue sampling.

Figure 1 (craniocaudal view) shows a 1 cm. spiculated mass in the right inner breast (arrow). Local anesthesia is administered directly over the area to be biopsied. A small skin puncture is made and a 14-gauge needle attached to an automated biopsy gun is placed directly into the abnormality under computer guidance. Figure 2 demonstrates the pre-biopsy position of the needle with respect to the lesion. The post-biopsy film (Figure 3) shows the needle through the mass confirming the lesion was sampled.

Stereotactic biopsy has achieved the same sensitivity (95%) as open surgical biopsy. The advantages of stereotactic breast biopsy include improved cosmesis and decreased morbidity. The patient is able to resume routine activities the same day. In addition, the cost of stereotactic biopsy is less than half that of open surgical biopsy. With the emphasis on medical cost containment, this procedure could dramatically reduce open biopsies of benign breast lesions and two-stage surgical procedures for treatment of breast cancer.



FIGURE 1

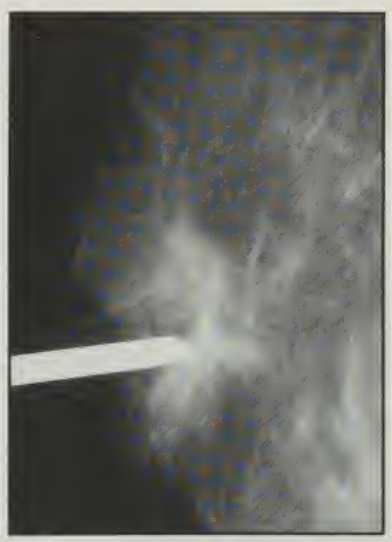


FIGURE 2



FIGURE 3

At Drs. Copeland, Hyman & Shackman, P.A. we are proud of our high resolution, state-of-the-art imaging. We look forward to consulting with you on any diagnostic imaging procedure in order to best serve you and your patients in the most expeditious and economic manner.

The mammography centers of Drs. Copeland, Hyman and Shackman, P.A., are accredited by the American College of Radiology. Both screening and diagnostic mammography are available. Weekend and evening appointments are offered for scheduling convenience.

You work hard to gain your patients' trust and confidence. At Drs. Copeland, Hyman & Shackman, we'll help you keep it.

Drs. Copeland, Hyman & Shackman P.A.

Mammography is available at the following locations:

Pikesville
1700 Reisterstown Rd.
(410) 486-8000
122 Slade Avenue.
(410) 486-0200

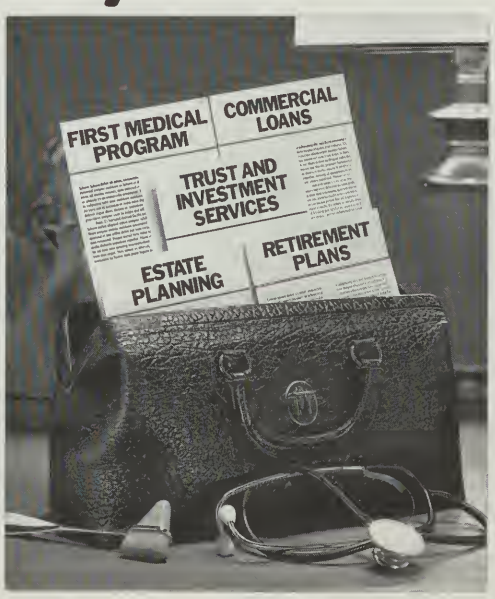
Brooklyn / Anne Arundel County
615 Hammonds Lane
(410) 636-5191

Essex / Rosedale
9101 Franklin Square Drive
(410) 574-3636

White Marsh
White Marsh Health Center
8114 Sand Piper Circle
(410) 931-6550

Bel Air
Harford Imaging Center
104 Plumtree Rd.
(410) 515-4000 / 569-4355

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Baltimore County: 832-7854/**Lower Eastern Shore:** 548-7200
Upper Eastern Shore: 479-3130/**Frederick County:** 698-7856/**Harford County:** 836-5700
Howard/Carroll County: 964-6808/**Montgomery County:** 840-6300
Prince Georges County: 952-5600/**Washington County:** 790-6800

Diabetic retinopathy: A review

Margaret Liv Blom, M.D.; W. Richard Green, M.D.; and Andrew P. Schachat, M.D.

From the Johns Hopkins Medical Institutions, Baltimore, Maryland, where Dr. Blom is an ophthalmologist at the Wilmer Institute; Dr. Green is a professor of ophthalmology, Eye Pathology Laboratory, and associate professor of pathology, Department of Pathology; and Dr. Schachat is chief, Retinal Vascular Service.

ABSTRACT: *In the United States, diabetic retinopathy is the leading cause of new blindness in those of occupational age. We present an overview of risk factors, including renal disease, uncontrolled blood pressure, pregnancy, poor glucose control, elevated glycosylated hemoglobin, duration of disease, and age at time of diagnosis; pathogenesis, addressing the involvement of aldose reductase, nonenzymatic glycosylation of proteins, vasoproliferative factors, ischemia and vasodilation, systemic growth factors, and platelets and blood viscosity; pathology, including nonproliferative, preproliferative, and proliferative retinopathy; and the management of this condition.*

Diabetes mellitus affects 5% of the world population and is the second leading cause of legal blindness in adults in industrialized countries.[1] Estimates from the Centers for Disease Control and Prevention indicate there are 50,000 people with blindness due to diabetes in the United States, with 5,800 new cases developing per year.[2]

Diabetes mellitus is due to a relative or absolute insulin deficiency that results in glucose excess. This glucose excess affects large and small blood vessels over time resulting in atherosclerosis and hyalinization of arterial walls. With time, secondary changes due to this process occur predominantly in the kidneys, peripheral nerves, pancreas, and eyes, resulting in a life expectancy reduction for men and women of at least 9.1 and 6.7 years, respectively.[3,4]

One ocular manifestation of diabetes mellitus is diabetic retinopathy, which occurs in 1.5%–2% of all diabetic individuals.[5] In the United States, diabetic retinopathy is the leading cause of new blindness, particularly among people of occupational age.[6,7] More importantly, mortality rates are significantly elevated in patients with diabetic retinopathy.[4] Diabetic retinopathy is best described as a capillary microangiopathy involving loss of pericytes

and endothelial cells with changes in the basement membrane thickness. This results in microinfarctions, exudates, retinal edema, and neovascularization. These changes can proceed to vitreous hemorrhage, traction, and retinal detachment causing severe loss of vision.[8]

We present an overview of diabetic retinopathy focusing on risk factors, pathogenesis, pathology, and management—emphasizing the value of screening to detect early, treatable disease.

Risk factors

Renal disease, uncontrolled high blood pressure, pregnancy, poor glucose control, and elevated glycosylated hemoglobin predispose a patient to diabetic retinopathy. Health-related behavior, such as tobacco use, alcohol consumption, and aspirin intake,[9] as well as gender,[4] are more controversial risk factors. Duration of disease and age at time of diagnosis are also important prognostic factors.[6] Race may also turn out to be an important prognostic factor. In a recent study by Hanis and others, it was discovered that Hispanics in general, and Mexican-Americans in particular, are affected with noninsulin-dependent diabetic mellitus (NIDDM) several fold more frequently than the general population.[4]

Renal disease. Renal disease, with its manifestation of proteinuria, and elevated blood urea nitrogen and creatinine serum levels, is an excellent predictor of diabetic retinopathy. A study by Jerneld and Algvere[10] of 365 patients with diabetes, found that 66 (18%) had proteinuria. Of these 66 patients, 39 (59%) had diabetic retinopathy. Proteinuria and serum creatinine correlated with increasing severity of retinopathy. Of 47 patients with proliferative diabetic retinopathy (PDR), 19 (40%) had proteinuria. Of 124 patients with retinopathy of other grades of severity, 20 (16%) had proteinuria. Visual acuity in the best eye was negatively correlated with proteinuria, which was present in 17 of 203 (8.4%) patients with a visual acuity of 20/20, compared with 8 of 15 (53%) with a visual acuity of 20/200 or less.

Uncontrolled high blood pressure. Volhard's statement, *"Ich habe noch keine retinitis diabetica gesehen bei der es sich nicht um eine hypertonie gehandelt hat,"* roughly translated as, "I have never seen a patient with diabetic retinopathy that was not hypertensive," has received much attention and criticism over the past years.[6,11] Subsequent studies have shown that although there is good correlation between the presence of hypertension and diabetic retinopathy in patients with nephropathy, blood pressure in patients without nephropathy does not seem to be as strong a risk factor as previously thought.[6,12]

Pregnancy. Recent studies of retinopathy during pregnancy have demonstrated that some deterioration is common, but, in many cases, postpartum improvement occurs. Approximately 10% of pregnant diabetic women without prior retinopathy develop background diabetic retinopathy, and about 4% of pregnant women with background diabetic retinopathy develop PDR.[6] In patients with treated PDR, no worsening occurred during pregnancy in the study done by Singerman and coworkers in 1980.[13]

It has been concluded that changing retinopathy during pregnancy cannot be interpreted without the assessment of concurrent changes in the regulation of maternal diabetes, and that the abrupt institution of improved diabetic control during pregnancy may be one factor in the deterioration of background retinopathy seen during pregnancy.[6]

Poor glucose control. A large amount of evidence supports the claim that hyperglycemia causes microvascular changes that result in diabetic retinopathy. In one study, laboratory dogs with induced hyperglycemia were divided into three groups. Dogs in the first group had their glucose levels strictly controlled for 5 years. The dogs in the second group had their glucose levels poorly controlled for 2.5 years, with subsequent good control for 2.5 years. The dogs in the third group were poorly controlled for 5 years. Only in the first group of dogs was there no evidence of retinopathy. Surprisingly, there was progression of retinopathy in the second group during the good-control period.[6,15]

Elevated glycosylated hemoglobin. In 1976, Bunn et al[14] noted that the formation rate of HbA_{1c} was directly proportional to the time-averaged concentration of glucose within the erythrocyte, and, therefore, that the HbA_{1c} level in a diabetic patient could be used as a reflection of the adequacy of control over a sustained time period. It was the belief of Bunn et al that many diabetes complications were attributable to the cumulative effects of hyperglycemia, and the researchers suggested that serial measurements of HbA_{1c} might prove useful in monitoring diabetic patients and assessing the adequacy of control. In patients under 30 years of age, those who have more than 13.5% of their hemoglobin glycosylated are prone to proliferative diabetic retinopathy.[6]

Duration of disease. Of the risk factors mentioned, duration of disease—at the present stage of investigation—appears to be most important in diabetic retinopathy development.[6] In a study of noninsulin dependent diabetic patients, Frank et al[6,15] noted that diabetic retinopathy was uncommon in patients who had the disease less than 5 years. The incidence of background diabetic retinopathy increased to 27% in patients with the disease for 5–10 years and to 71% in patients with the disease for more than 10 years.[6]

Age at time of diagnosis. Of particular interest is that retinopathy is more strongly associated with diabetes duration after 13 years of age than before it.[6,16] In 143 children who developed insulin-dependent diabetes mellitus (IDDM) before the age of puberty, Jackson and others[16] noted that no retinopathy

developed before the onset of puberty regardless of disease duration. Although rare cases of severe retinopathy in prepubescent diabetic patients have been reported, it usually occurs only after puberty. The risk of retinopathy in 25-year-old patients is roughly the same regardless of the age of onset.[6]

Pathogenesis of diabetic retinopathy

Diabetic retinopathy pathogenesis is still undetermined despite years of intense research. Although chronic hyperglycemia has been recognized as the basis for diabetic retinopathy, the mechanism through which diabetic retinopathy occurs is unknown.[6,15] Aldose reductase, nonenzymatic glycosylation of proteins, vasoproliferative factors, ischemia and vasodilation, growth hormones, and platelets and blood viscosity are involved in the theories currently under investigation.

Aldose reductase. In 1974, Kinoshita[8,17] demonstrated the accumulation of sorbitol in the cataracts of diabetic patients. Aldose reductase mediates glucose conversion into sorbitol. Sorbitol accumulation with its consequent osmotic effects and damage to lens epithelial cells, which have a high concentration of aldose reductase, is thought to be responsible for the diabetic cataract. Similar processes are thought to occur in Schwann cells and retinal pericytes.[8]

Recent studies have demonstrated that, in hyperglycemia, many cells having increased intracellular sorbitol due to aldose reductase activity also display decreased intracellular concentrations of *myo*-inositol. This is thought to be due to an inhibition of cellular *myo*-inositol transport, which is corrected by aldose reductase inhibition. *Myo*-inositol, important in the synthesis of phosphoinositide, is a necessary sugar for cell membrane biosynthesis.[15]

Also, in cells with increased intracellular sorbitol, the activity level of protein kinase C and of cell membrane sodium-potassium-activated adenosine triphosphatase (Na+ K+ ATPase) is reduced. This condition is reversed by aldose reductase inhibition.[15]

Nonenzymatic glycosylation of proteins. In 1988, the theory of nonenzymatic glycosylation of proteins was suggested as an alternative to the sorbitol pathway theory as a cause of diabetic retinopathy.[15] It was suggested that glycosylation of critical proteins within the cell and in the extracellular matrix might be the mechanism responsible for diabetic retinopathy. Glucose molecules attaching onto the epsilon-amino groups of lysine residues on proteins, in direct proportion to ambient glucose concentration, is postulated to cause the cross-linking of these proteins. In proteins with enzymatic activity, this cross-linking would alter and possibly render ineffective their biologic activity, and, therefore, the extracellular matrix configuration and the capability or activity of certain types of cells such as macrophages.[15] In testing this hypothesis, it has been suggested that aminoguanidine, a specific inhibitor of nonenzymatic glycosylation, might be a therapeutic agent.[15]

Vasoproliferative factors. Another hypothesis proposes that the hypoxic retina produces or activates a vasoproliferative factor that diffuses to nearby blood vessels, inducing neovascularization. In the normal retina, there is a balance between factors promoting and inhibiting angiogenesis. Neovascularization occurs when this balance is upset by an overproduction or activation of angiogenic factors or by a reduction in the quantity or activity of inhibitory agents.[6,15] Clinical evidence supporting this hypothesis includes

1. Tumors produce an angiogenic factor that causes blood vessels from normal adjacent tissue to grow forward and into the tumor.[6]
2. In branch retinal venous occlusion, retinopathy of prematurity, Eales disease, and sickle cell retinopathy, ischemic areas of the retina are adjacent to areas of neovascularization, and the neovascularization tends to grow into the hypoxic areas.[6]
3. Neovascularization of the disc and iris, both of which can be reversed by panretinal photocoagulation, argue for a diffusible factor.[6]

Absence of potential inhibitors and the presence of angiogenic factors are responsible for neovascularization. This may explain why pericyte dropout occurs in neovascularization, and why microaneurysms occur with the loss of inhibitory factors for endothelial cell proliferation.[6]

Ischemia and vasodilation. An alternative hypothesis is that chronic hypoxia stimulates neovascularization by causing vessel dilation, which results in endothelial cell proliferation. During hyperglycemia, the retina consumes oxygen at a higher rate than normal. This results in dilation of retinal vessels as they autoregulate to keep the oxygen pressure in the tissue at normal level. The increased capillary blood pressure and chronic dilation causes increased vessel wall stretch, resulting in leakage and endothelial proliferation forming microaneurysms and new vessels.[6,8] Photocoagulation, therefore, is the specific treatment for diabetic retinopathy since it reduces oxygen demand and vasodilation.

Systemic growth factors. Other substances, such as growth hormone and an insulin-like growth factor 1 (IGF-1), produced systemically and arriving from sites other than the retina, are thought to play a role in some forms of retinal neovascularization. Recently, Merimee[18] reported elevated levels of IGF-1 in serum from PDR patients compared with diabetic patients without proliferative disease. Merimee[18] suggests that this molecule is responsible, in part, for diabetic retinopathy development. Evidence to support this theory is provided by the discovery of IGF receptors on cultured retinal microvascular pericytes and endothelial cells, and by the fact that both cells respond to IGF-1 with increased DNA (deoxyribonucleic acid) synthesis.[6]

Platelets and blood viscosity. The hypothesis that platelet abnormalities in diabetic patients contribute to diabetic retinopathy has been around for a while, but no recent research substantiates this. Past research has shown that platelets of diabetic patients are stickier than platelets of nondiabetic individuals,[6] and that platelets of diabetic patients are especially sensitive to thromboxane and other aggregating agents such as epinephrine.[6] It is thought that these abnormalities in platelet adhesion and aggregation result in focal capillary occlusion and focal areas of ischemia in the retina which, in turn, result in diabetic retinopathy.[6] Other hematologic abnormalities seen in diabetic patients, such as increased blood viscosity, increased erythrocyte aggregation, and decreased erythrocyte deformability, are also thought to contribute to diabetic retinopathy through sluggish circulation and endothelial damage.[6,8]

Pathology of diabetic retinopathy

Diabetic retinopathy is classified into three main stages: (1) nonproliferative (background diabetic retinopathy), (2) preproliferative (severe or advanced nonproliferative retinopathy), and (3) proliferative. Involvement of the choroid may occur in any of these stages. Since mortality rates of individuals in the three stages of retinopathy have been found to be 13.1%, 21.4%, and 39.5%, respectively, at least in Mexican-Americans, it behooves the practitioner to be able to identify these clinical stages on routine eye examination.[4]

Nonproliferative diabetic retinopathy. One of the earliest changes in nonproliferative diabetic retinopathy (NPDR) is capillary basement membrane thickening and pericyte dropout.[6,8] In normal eyes, the pericyte to endothelial cell ratio is 1:1. In diabetic patients, however, pericytes apparently die off and decrease in number. Capillary wall dilations occur in areas of absent pericytes, resulting in the development of microaneurysms—one of the earliest changes visualized with ocular examination. The microaneurysms may be quiescent for years, gradually disappear due to hyalinization and occlusion, or rupture, resulting in intraretinal hemorrhage.[8]

Hemorrhages, which usually occur in the inner plexiform, inner nuclear, or outer plexiform layers, may vary in size and become extensive when leakage occurs into the vitreous. Hemorrhages, occurring in the inner nuclear or outer plexiform layers, appear round or oval-shaped, while more superficial hemorrhages appear flame- or splinter-shaped.[8]

Exudates result from plasma leakage from microaneurysms or diffuse capillary leakage and tend to form in clusters. Serum leaks into surrounding retina from microaneurysms or leaking capillaries and the water content are taken up by surrounding retina and retinal pigment epithelium. This leaves a lipid-rich residue that accumulates mostly in the outer plexiform layer. These exudates may form a circinate pattern around clusters of microaneurysms, around large solitary microaneurysms, or around microaneurysms surrounding areas of capillary nonperfusion. The exudates, along with plasma leakage, may result in retinal thickening of the macula (macular edema)—the leading cause of reduced vision in patients with diabetes.

Large accumulations of fluid and exudate often collect in the outer plexiform layer of the parafoveal region, presumably because its anatomic configuration allows for more distensibility of the retina. These exudates are mostly extracellular and are composed of extracellular lipid and lipid-ladened histiocytes.[8] Large accumulations of fluid and exudate may occur in the outer plexiform layer of the macula in a cystoid pattern. Incoming light is scattered by the irregular surface of the retina, and visual acuity is decreased.[15,19,20]

In addition to retinal abnormalities found in background diabetic retinopathy, there may be involvement of the choriocapillaris. PAS-positive material thickens the walls of, and occasionally obliterates, the choriocapillaris.[8] Bruch's membrane appears quite prominent in histologic sections of the eyes of diabetic patients due to thickening of the choriocapillaris, which contributes to the outer portion of Bruch's membrane.[8]

The Early Treatment Diabetic Retinopathy Study reports[20–22] indicate that the risk of a patient with mild to severe NPDR developing PDR in a 5-year period is 25% to 80% (**Table 1**).[20–22]

Table 1. Risk of developing PDR based on ETDRS grade levels[20,22]

	Percent developing PDR over time		
ETDRS grade level of NPDR	**1 yr**	**3 yrs**	**5 yrs**
Level 35, mild	5	15	25
Level 43, mild to moderate	12	30	45
Level 47, moderate to severe	24	50	67
Level 53, severe	50	70	80

Table adapted from Bressler NM. Management of nonproliferative diabetic retinopathy. Johns Hopkins Resident Lecture Series. August 6, 1991.
PDR = proliferative diabetic retinopathy; ETDRS = Early Treatment Diabetic Retinopathy Study; NPDR = nonproliferative diabetic retinopathy

Preproliferative diabetic retinopathy

Preproliferative diabetic retinopathy or severe NPDR, in addition to causing changes mentioned above, also causes some background changes that may herald the onset of proliferative retinopathy. The Early Treatment Diabetic Retinopathy Study (ETDRS) found that venous beading and venous loops, multiple retinal hemorrhages, widespread capillary nonperfusion, widespread leakage on fluorescein angiography, and intraretinal

microvascular abnormalities (IRMA) are all risk factors for proliferative retinopathy (**Table 2**). Soft exudates are not found to be as significant.[21]

Venous beading—a clinical term—is the end stage of a process in which veins develop fusiform changes, eventually acquiring a sausage-like appearance.[8] Some beaded veins in diabetic retinopathy are due to intraretinal, perivenous neovascularization. Recent studies have shown that the percentage of people developing PDR who have venous beading for 1–5 years increases from 40% to 80%.[20,22,23]

Table 2. Risk of developing PDR as determined by fundus features[21]

Fundus features	Percent developing PDR over time		
	1 yr	3 yrs	5 yrs
Venous beading	40	60	80
Extensive microaneurysms (D4-5)	10	20	40
Intraretinal microvascular abnormality	20	40	60

Table adapted from Bressler NM. Management of nonproliferative diabetic retinopathy. Johns Hopkins Resident Lecture Series. August 6, 1991.
PDR = proliferative diabetic retinopathy

The presence of microaneurysms is a risk factor in diabetic retinopathy. The approximate risk of developing PDR in diabetic patients who have extensive (D4-5) microaneurysms for 1–5 years is 10% to 40%.[8,20,23] The term "extensive (D4-5) microaneurysms" refers to many definite (D) microaneurysms in at least four to five fields. Finding one to two microaneurysms in a diabetic patient's eye is not considered prognostic.

Shunt vessels, dilated capillaries, and IRMA also are important predictors of PDR.[8,20,23] The dilated capillaries in IRMA apparently function as collateral channels and bear strong resemblance to surface neovascularization of the retina. Unlike neovascularization, however, which leaks profusely with intravenous fluorescein angiography, the dilated capillaries in IRMA do not. These areas of IRMA surround variably sized areas of capillary nonperfusion. The risk of developing PDR increases from 20% to 60% in patients having IRMA for 1–5 years.[20,23]

Cotton wool spots (soft exudates, which represent microinfarctions of the nerve fiber layer), once thought to be an important warning sign for PDR, are no longer considered an important risk factor.[21] Cotton wool spots result from occlusions or infarctions of precapillary arterioles with resultant axonal swelling (cytoid bodies).

With increasing duration of the preproliferative diabetic retinopathy stage, terminal arterioles begin to develop hyaline thickening, corkscrew coiling, and narrowing of the lumen. Venous loops and varicosities develop, and the pericyte and endothelial cell basement membrane thickens. The capillary wall layers become separated by lipid and debris, and, eventually, the pericytes and endothelial cells disappear. The result is the formation of nonfunctioning ghost capillaries and widespread areas of capillary nonperfusion.[8]

Proliferative diabetic retinopathy

Proliferative diabetic retinopathy, in addition to containing all of the features of background and preproliferative diabetic retinopathy, is characterized by neovascularization with extension into the vitreous in the region of the disc (NVD) and elsewhere in the retina (NVE). NVD is characterized by new vessel formation arising directly from the optic nerve head or within the peripapillary retina less than one disc diameter from the optic nerve head margin. These new proliferative vessels usually arise from preexisting veins and, early on, appear as small or large collections of fine naked vessels on ophthalmic examination. Eventually, gliosis and fibrosis, vitreous hemorrhage, and traction retinal detachment may occur. More limited traction may result in dragging of the optic disc and macular heterotopia.[8] Eventually, the patient is left with hand-movement vision or worse, if left untreated.

In PDR, new vessels that form along the inner retinal surface are thin walled and have poorly developed junctional complexes and fenestrated endothelium, which allows for serum leakage and occasional vitreous hemorrhage.[6,8] The new vessels apparently grow or are pulled into the direction of least or lower resistance. With NVD, the lack of an internal limiting membrane (ILM) at the optic nerve head allows for an abundant proliferation of new vessels that are capable of expanding onto the posterior surface of the vitreous. With NVE, new vessels extend into the vitreous and onto the posterior surface of detached vitreous.[8]

Posterior vitreous detachment is more common in diabetic than nondiabetic subjects studied postmortem.[6,8] Cells with the contractile protein actin have been observed by electron microscopy with the use of myosin subfragment 1 in a surgical specimen from a patient with a retinal detachment and PDR.[8] With neovascular tissue contraction, tension is placed on the vitreoretinal bands, which in turn places tension on new vessels, which may bleed. This results in traction of the retina with production of cystic degeneration, schisis, and retinal detachment with or without tears.

Management of diabetic retinopathy

Visual loss in diabetic retinopathy patients is caused by clinically significant macular edema (CSME), macular nonperfusion, or the sequelae of proliferative retinopathy. Powerful randomized clinical trials have shown that the first and third causes of visual loss are treatable or avoidable. Because even advanced retinopathy may be asymptomatic, the

Table 3. Screening recommendations[24]

Age at onset of diabetes mellitus	Initial exam	Subsequent exam
0-30	5 years after diagnosis	Annually*
30+	At time of diagnosis	Annually*

** more frequent follow-up indicated based on increasing disease severity*

key to diabetic retinopathy management is timely detection of treatable disease **(Table 3)**. To develop a rational screening strategy for patients with diabetic mellitus, one must know the epidemiology of CSME and proliferative retinopathy. The prevalence of these key features relates chiefly to disease duration.

Since CSME and PDR may be asymptomatic, since they respond to treatment (details outlined below), and since screening is cost effective for society,[7] numerous organizations, including the American Academy of Ophthalmology and the American Diabetes Association, have published guidelines for screening:[24]

1. What is the status of the diabetic retinopathy—nonproliferative, severe nonproliferative, or proliferative?
2. Is there macular edema?
3. Does the patient have risk factors for the development of proliferative retinopathy or high-risk proliferative retinopathy?
4. Does the patient have features of high-risk PDR?[6,24-26]

Clinical trials have shown that macular edema treatment is indicated only when it is clinically significant. Macular edema is defined by the ETDRS group as thickening of the retina within one disc diameter of the macula or hard exudates greater than or equal to standard photograph 3 in a standard 30° photographic field centered on the macula (field 2) with some hard exudates within one disc diameter of the center of the macula.[19,22]

CSME is defined as thickening at or within 500 μm of the center of the macula, or hard exudates at or within 500 μm of the center of the macula if associated with thickening of the adjacent retina, or a zone or zones of retinal thickening one disc area in size at least part of which is within one disc diameter of the center of the macula.[22,25-27] CSME is a clinical diagnosis. It is observed with the use of stereo slit lamp biomicroscopy and does not necessitate the use of intravenous fluorescein angiography.[28]

Patient visual acuity is not considered part of the criteria for CSME, although caution is recommended when treating 20/20 eyes. Treatment of macular edema that is not clinically significant has not been found to be of value in visual loss prevention.[19-21] Treatment of CSME has been found to reduce the risk of visual loss and to improve vision. CSME treatment is guided by the findings of intravenous fluorescein angiography. Focal laser treatment is applied to treatable lesions—areas of leaking microaneurysms and abnormal capillaries—and light scatter or grid to areas of diffuse leakage not attributed to focal microaneurysms or abnormal capillaries.[25,26]

High-risk PDR is defined as the presence of new vessels on or within one disc diameter of the optic nerve (NVD) greater than or equal to standard photograph 10A[18] (about 1/4 to 1/3 disc area), with or without vitreous or preretinal hemorrhage, or vitreous or preretinal hemorrhage accompanied by new vessels, either NVD less than or equal to standard photograph 10A,[19] or new vessels elsewhere (NVE) greater than or equal to disc area.[22] The chance of developing high-risk PDR increases from 21.7% to 63.8% in patients having mild PDR for 1–5 years. In patients with moderate PDR, the risk increases from 45.5% to 74.7% in 1–5 years.[22] Studies conclude that patients with high-risk PDR should be treated promptly with scatter laser photocoagulation outside of the arcade **(Table 4)**.[22,29]

Patients with severe NPDR associated with intraretinal microvascular abnormalities and venous beading have about a 50% risk of developing PDR over the next 1–2 years, and a 20%–25% risk of developing high-risk diabetic retinopathy over the course of two years. As mentioned before, patients with

Table 4. Development of high-risk proliferative retinopathy in all eyes (assigned to deferral by baseline retinopathy severity level)*

	Cumulative rate (%) of high-risk PDR at visit		
Baseline retinopathy severity[21]	**1 yr**	**3 yrs**	**5 yrs**
Level ≤ 35 (mild NPDR)	0.8	6.7	15.5
Level 43 (moderate NPDR)	3.3	14.2	26.5
Level 47 (moderately severe NPDR)	8.6	24.4	39.4
Level 53a-d (severe NPDR)	14.6	39.5	56.0
Level 53e (very severe NPDR)	45.0	64.9	71.3
Level 61 (mild PDR)	21.7	48.6	63.8
Level ≥ 65 (moderate PDR)	45.5	67.2	74.7
Total	12.1	28.0	40.7

**Includes eight eyes classified as not having high-risk proliferative diabetic retinopathy (PDR) by eligibility grading, but classified as having high-risk PDR on subsequent detailed grading. Modified from ETDRS report number 12.[22]*

PDR who do not fit the criteria for high-risk diabetic retinopathy also apparently have a 50%–75% risk of developing high-risk PDR over the next year. Due to these findings, it is recommended that reliable patients be followed and observed at three-month intervals, and that laser panretinal photocoagulation (PDR) be promptly initiated when high-risk PDR occurs.[22] For patients with bilateral severe NPDR or mild proliferative retinopathy, many retina specialists favor initiation of PRP in one eye.

PRP is known to exacerbate macular edema. In fact, in the ETDRS, patients who received early scatter treatment had an increased rate of mild visual loss from macular edema, although they did have reduced severe visual loss.[22] For this reason, many retina specialists recommend aggressive treatment of CSME in those patients at high risk of developing PDR prior to the initiation of PRP. CSME is also treated aggressively prior to, or concomitant with, PRP for non-high-risk PDR. For patients with CSME and high-risk PDR, many retina specialists are reluctant to defer PRP while treating CSME. CSME may be treated after or during PRP.

The key goals of diabetic retinopathy management are

1. Development of a good relationship with the primary care provider to enhance optimal diabetic control and management of high blood pressure and serum lipids.
2. Identification of patients with CSME and PDR.
3. Treatment of CSME, prior to PRP when possible.
4. Treatment of high-risk PDR with PRP, and PRP for some patients as they approach high-risk PDR.
5. Vitreous surgery for patients who develop complications of PDR such as macular traction detachment or nonclearing vitreous hemorrhage.
6. Low vision rehabilitation for patients who do not respond to treatment.

It is hoped that with better screening and earlier detection and treatment, diabetic retinopathy may be prevented or controlled. Because of the availability of effective treatment, the American Academy of Ophthalmology initiated the long-term education project, *Diabetes 2000.*[30] The project was designed to increase the speed with which research findings are translated into medical and surgical benefits for the American public. The primary goal of *Diabetes 2000* is the elimination of treatable diabetic blindness by the year 2000. It is hoped that *Diabetes 2000* will close the gap between advances in research and changes in treatment patterns. Drs. Ronald E. Smith and Arnall Patz, leaders of the American Academy of Ophthalmology, stated the following: "As ophthalmologists, we are the physicians uniquely qualified to diagnose and treat diabetic retinopathy. By continuously updating our medical knowledge of this multisystem disorder, and by forging partnerships with primary care physicians for more effective and efficient management of these patients, we have an even greater opportunity: we can significantly reduce blindness due to diabetes by the year 2000."[30]

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Hypertension: A review with emphasis on therapeutics with ACE inhibitors

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ABSTRACT: *Hypertension, more prevalent with aging, is a major risk factor for cardiovascular disorders. Accordingly, it is important to decrease blood pressure and maintain it in an acceptable range to lessen morbidity and mortality. When nonpharmacological therapy fails, drug therapy should be instituted. The ideal drugs lower blood pressure, have few adverse side effects, and may have additional benefits on coexisting maladies. ACE (angiotensin-converting enzyme) inhibitors are excellent first-line drugs because they have few adverse effects and may have additional benefits on cardiac and renal status. This overview discusses many aspects of hypertension and its therapy, but emphasizes use of ACE inhibitors in the elderly.*

Ameliorating hypertension is a significant challenge to practicing physicians because elevated pressure is a major risk factor for cardiovascular disorders—the leading cause of death in this country.[1] Approximately 50% of all mortality can be attributed to cardiovascular disorders, primarily myocardial infarctions and strokes.[2] Additional complications associated with blood pressure elevation are renal failure, left ventricular hypertrophy, left ventricular failure, angina pectoris from coronary artery disease, hypertensive encephalopathy, cerebrovascular disease, cerebral thrombosis and hemorrhage, transient ischemic attacks, and peripheral vascular disease.

Because hypertension is such an important risk factor, it is necessary that the entity be defined definitively. Hypertension is a consistent elevation of blood pressure—systolic, diastolic, or combined. In general, normal adult systolic blood pressure is below 140 mm Hg, and diastolic blood pressure is below 90 mm Hg. Blood pressure consistently above the acceptable range is associated with significant increases in cardiovascular morbidity and mortality.[3] Normal readings are lower in infancy and youth and, characteristically, rise with age. Therefore, upper limits of pressure normality are lower

in younger individuals. The following upper limits of normality are reasonable: children under 6 (110/75 mm Hg), 6 through 9 years of age (120/80 mm Hg), 10 through 13 years (125/85 mm Hg), and 14 through 18 years (135/90 mm Hg).[4]

It is useful to further subclassify blood pressure in adults: **mild hypertension** (diastolic 90–104 mm Hg), **moderate hypertension** (diastolic 105–114 mm Hg), **severe hypertension** (diastolic ≥ 115 mm Hg).[5] About 80% of hypertension is mild, while less than 5% is severe. Often, diastolic pressure remains within the normal range and only systolic pressure is elevated. **Isolated systolic hypertension** (>160 mm Hg)—especially prevalent in the elderly with poorly compliant vasculature—includes **borderline isolated systolic hypertension** (140–159 mm Hg).

Hypertension is also classified in terms of etiology. Unfortunately, pathogenesis is unknown in most cases.[6] **Essential hypertension** is blood pressure exceeding the accepted range of normality, for which no specific etiology can be found after a thorough attempt is made to discover the cause. This is commonly called **primary** or **idiopathic hypertension**. The majority of hypertensive patients have essential hypertension (> 90% with consistently elevated pressure readings). In most populations, systemic blood pressure rises as aging progresses, and development of hypertension is often referred to as age-related. In addition, race, gender, heredity, and environmental factors—such as nutrition and various toxins—may contribute to the overall rise in pressure. **Table 1** lists many of the common conditions associated with primary hypertension.

By definition, the etiology of **secondary hypertension** is understood. Underlying causes (also listed in **Table 1**) include renal (the most common association), endocrine, vascular, and other diseases. When recognized early, the underlying cause for secondary hypertension often can be removed, curing the patient or, at least, ameliorating pressure elevation.

Hypertension, along with degenerative arthritis, is a common chronic disorder in the elderly. Accepting the above pressure ranges, hypertension afflicts 25% to 30% of the overall population.[7] Although elevated blood pressure is more prevalent with aging, it is still somewhat surprising to find that roughly 50% of those over 50 and 66% of those over 65 are hypertensive.[8,9] Among whites, elevated blood pressure is seen equally in both genders. In African-Americans, more females are burdened with hypertension. More than three of four African-American females over age 65 are considered hypertensive by the criteria given above.[8] Among African-Americans and the elderly, hypertension is also associated with more deleterious events.[9]

Because the proportion and absolute number of elderly persons is increasing rapidly, hypertension will become an even greater public health problem in the future. Over 31 million Americans are 65 or older, and by the year 2030, almost 20% of the population will exceed 65.[3] Rosenfeld[10] estimates that, eventually, physicians will spend 75% of their time treating elderly patients with hypertension and cardiovascular disorders. Therefore, knowledge concerning all aspects of age-related blood pressure elevation is crucial.

Table 1. Conditions or factors associated with blood pressure elevation

Essential hypertension

- Age
- Heredity, probably multiple genes
- Dietary factors: Na, K, Mg, Ca, fats, fibers, sugars
- Obesity
- Growth
- Stress
- Alcohol
- Increased cardiac output
- Impaired responsiveness of baroreceptors
- Cardiac and vascular hypertrophy

Secondary hypertension

- Renovascular disease
- Renal disease
- Coarctation of the aorta
- Endocrine diseases: Conn's and Cushing's syndromes, pheochromocytoma
- Drugs: steroids, contraceptive pill

Clinical evaluation and diagnosis

Blood pressure constantly changes. It is well recognized that diurnal variations in pressure exist, with the lowest readings usually occurring at night.[4] In addition, many exogenous factors can alter pressures for brief intervals.[11] Therefore, it is necessary to take as many readings as possible to establish a hypertension diagnosis before committing a patient to lifelong treatment.

Many avoidable factors affect and increase blood pressure. "White coat syndrome" is a well-recognized entity: blood pressure rises due to anxiety when the physician is about to take a measurement. Thus, the patient must be placed at ease prior to assessment. Extraneous factors that could affect blood pressure should be eliminated. These include exertion, eating within minutes of the reading, cold, bladder distention, anxiety, and lack of sleep. Medications, such as estrogen, adrenal steroids, and adrenergic drugs (diet pills), can also affect blood pressure.

Evaluating blood pressure requires many considerations.[12] To take a pressure, the cuff should be of adequate size. Too narrow a cuff tends to give a high reading. When obtaining a routine pressure measurement, inflate the cuff to a level just above the expected systolic pressure. This can be accomplished by simultaneously palpating the radial artery and noting the disappearance of the pulsation. This maneuver has additional benefit in the elderly.[13] If the artery remains palpable after the pulse disappears, this suggests the vessel is calcified and is associated with an aberrantly high reading—**pseudohypertension**. Calcification of vessels reduces compliance, leading to errors in evaluating pressure in the elderly.

Over the years, measurement of diastolic pressure has been controversial. At present, it is generally accepted that diastolic pressure is recorded when the sounds disappear completely. In certain cases, ambulatory pressure readings may prove useful.[14]

Overall assessment objectives of a hypertensive patient are threefold: to determine if correctable causes for pressure elevations exist; to establish the presence of hypertension complications; and to check whether contraindications exist for the chosen therapy. Many disorders are associated with high blood pressure, including obesity,[15] diabetes mellitus,[16] and renal failure.[17] Potentially correctable causes of hypertension include pheochromocytoma, Cushing's syndrome, coarctation of the aorta, renal artery stenosis, unilateral renal disease, hyperthyroidism, and hyperaldosteronism. Much information on etiology and complications of hypertension can be found by conducting a thorough medical history.

Physical examination may reveal findings such as atrioventricular (AV) nicking, vasoconstriction, hemorrhages, exudates, or other perturbations of the cardiovascular system that suggest chronic elevation of blood pressure. Routine laboratory examination (**Table 2**) consists of urinalysis, blood urea nitrogen (BUN), creatinine, electrolytes, chest x-ray, blood count, sedimentation rate, and electrocardiogram. If warranted, special examinations may pinpoint etiology. These investigations include intravenous pyelogram (IVP), renal arteriography, plasma renin activity (PRA), aortography, computerized axial tomography (CAT) scan, urinary catecholamines, echocardiogram, and ambulatory pressure monitoring.

A hypertensive emergency is when blood pressure elevation is severe enough to cause rapidly progressive end-organ damage. This may occur when blood pressure rises rapidly from normotensive levels to moderately hypertensive levels (200–225/130–140 mm Hg), such as in toxemia of pregnancy or acute glomerulonephritis. Hypertensive emergency more commonly occurs when essential hypertension is inadequately treated, and blood pressure rises gradually to levels in excess of 175–200/110–130 mm Hg. Patients typically present with a variety of symptoms, including headache, dizziness, blurred vision, shortness of breath, chest pain, and frequent urination. Patients sometimes develop cerebrovascular events, myocardial infarctions, congestive heart failure, or acute renal failure. Because clinical features of hypertensive crisis are often nonspecific, accurate diagnosis depends on a careful history, a physical examination, and a brief laboratory screen for evidence of end-organ dysfunction. Prompt, aggressive therapy is necessary to forestall permanent impairment of vital organs and even death.

Physicians should not overreact to severe blood pressure elevations that pose no immediate threat of organ damage. Under such circumstances, excessive lowering of blood pressure can precipitate acute ischemic events. This is especially risky in older patients with long-standing hypertension, poorly compliant vessels, and diminished baroreceptor responsiveness. Severe hypertension without imminent target organ damage can be considered **hypertensive urgency**, requiring lowering of pressure within hours to days, rather than the minutes to hours required in a true hypertensive emergency.

Overview of therapeutics

Ameliorating hypertension reduces early mortality, strokes, congestive heart failure, renal failure, and accelerated hypertension. Previous experience, however, indicates that the reduction of coronary heart disease is less evident in hypertensive patients undergoing pressure reduction with drug therapy. This may be due to adverse effects of diuretics and beta blockers on lipid and carbohydrate metabolism.[4] Most long-term studies have used these two types of drugs. While decreases in pressure derived from these two classes of antihypertensive agents may be beneficial, secondary metabolic perturbations may offset benefits. This has led some physicians to switch drug therapies

Table 2. Considerations in hypertension workup

Routine investigations

- Urine analysis
- Blood urea nitrogen, creatinine and electrolytes
- Chest x-ray
- Blood count and erythrocyte sedimentation rate
- Electrocardiogram

Special investigations

- Intravenous urography
- Renal arteriography
- Plasma renin, angiotensin II, and aldosterone
- Adrenal venography
- Computerized axial tomography (CAT) scan
- Plasma cortisol
- Aortography

from the older drugs to the new angiotensin-converting enzyme (ACE) inhibitors and calcium channel blockers. These two classes are associated with fewer and less severe adverse reactions.

Therapy may take the form of nonpharmacologic or pharmacologic interventions. Prior to committing the patient to drug therapy, one should remove adverse environmental factors influencing blood pressure. Many of these factors are listed in **Table 3**. Recognition of these factors suggests obvious remedies. For example, obesity and excess sodium and alcohol intake are frequently associated with hypertension. Therefore, losing excess weight and limiting sodium and alcohol intake are useful and generally accepted measures. Less accepted are adding potassium, calcium, and fiber to the diet and removing dietary sugars, fats, and alcohol. Exercise and relaxation therapy may be helpful, as well.

Table 3. Some exogenous factors influencing blood pressure

- **Dietary**
  - Calories
  - Micronutrients
    - Na (sodium)
    - K (potassium)
    - Ca (calcium)
    - Mg (magnesium)
    - P (phosphorus)
  - Macronutrients
    - Fats (saturated, unsaturated, 3 omega fatty acid)
    - Proteins
    - Carbohydrates (refined, complex, fiber)
  - Alcohol
- **Environmental**
  - Cadmium
  - Lead

Following inadequate responses to nonpharmacologic attempts to lower pressure, pharmacologic methods must often be instituted. A significant problem is untoward effects that can occur with pharmacologic agents. Numerous factors associated with aging—including pharmacokinetic and pharmacodynamic factors—make geriatric patients especially susceptible to adverse reactions. The most common perturbation associated with antihypertensive therapy is hypotension. The elderly are more susceptible to orthostatic hypotension because the baroreflex sensitivity, the response to catecholamines, and the intravascular volume generally decrease. Commonly used drugs, such as thiazides, often cause systemic potassium depletion. In addition to an enhanced tendency to hypokalemia, the elderly often have impaired drug metabolism, putting them at risk for excess drug accumulation. No antihypertensive drug is completely effective and safe for all individuals. Regimens must be individualized, and the physician must be ready to revise them when necessary.

Drugs commonly used in the elderly are often the same as those considered for younger patients. Major classifications of drugs for treating hypertension are listed in **Table 4**. Exactly how these drugs work to reduce blood pressure is largely uncertain. For example, theoretically, ACE inhibitors should decrease blood pressure by blocking formation of angiotensin II, but these agents are effective in many patients with low renin forms of hypertension. Some believe the ACE inhibitors may work through increased production of vasodilatory prostaglandins or kinins.[18,19] The following discussion briefly describes many classes of hypertensive agents, emphasizing ACE inhibitors.

Diuretics (thiazides, loop, and potassium-sparing). Use of oral diuretics to lower blood pressure has been well recognized for over 30 years. Thiazides—the diuretics used most for lowering pressure—come in many forms with different durations of action. Interestingly, long-term action is not closely related to diuretic action. While the initial mode of action may relate to lowering blood volume, the ultimate effect may be through reduced blood pressure responsiveness to endogenous vasoconstrictors. Thiazides definitely lower the incidence of stroke, but not coronary artery disease, perhaps because the metabolic effects negate the benefits of lowered pressure.[20] Nevertheless, diuretics are relatively inexpensive and often potentiate the actions of other agents. They may be used in the future in low doses as adjuncts to other therapeutic agents.

Table 4. Classification of common antihypertensive drugs

- Diuretics
  - Thiazides
  - Loop diuretics
  - Potassium-sparing diuretics
- Beta blockers
- Alpha blockers
- Combined beta and alpha blockers
- ACE inhibitors
- Calcium channel blockers
- Central alpha 2 agonists
- Direct -acting vasodilators

Diuretics often cause deleterious side effects. Some skin rashes and allergic reactions have been seen. Many electrolyte imbalances occur secondary to usage. The most common effects are hypokalemia, hypercalcemia, hyponatremia, and hypomagnesemia. Glucose intolerance, hyperuricemia, and hypercholesterolemia are not uncommon. Because hypokalemia is prevalent and serious, it is often recommended that the drugs be given with oral potassium supplementation or combined with a potassium-sparing diuretic, such as Aldactone (spironolactone), triamterene, or amiloride hydrochloride. Recent interest focuses on antihypertensive agents that can prevent or reverse left ventricular hypertrophy. In this respect, diuretics are less effective than several other agents.

Beta blockers (atenolol, metoprolol tartrate, pindolol, propranolol hydrochloride, timolol maleate). Beta blockers are particularly effective in young people with high cardiac output. They may possibly decrease cardiac output, lower circulating renin activity, prevent prejunctional uptake of catecholamines, or influence a central mechanism. Beta blockers differ in several ways. Some have partial agonistic or intrinsic sympathetic activity. There are differences in lipid solubility. Also, they may differ in relative selectivity in blocking beta 1-receptors in the heart versus beta 2-receptors elsewhere. Beta blockers, as suggested above, are most effective in those patients with tachycardia and high cardiac output. They are especially useful in hypertensive patients experiencing angina, migraines, or glaucoma.

As with diuretics, there are concerns about side effects. Some patients experience lethargy and intellectual impairment. Bad dreams, hallucinations, and depression are also associated. In addition, beta blockers can cause bronchoconstriction, peripheral circulatory impairment, and an adverse lipid profile. Diabetic patients receiving insulin simultaneously with beta blockers are especially prone to hypoglycemic episodes.[21] Reports concerning the ability of beta blockers to prevent or reverse left ventricular hypertrophy are inconsistent.

Alpha blockers (prazosin hydrochloride, terazosin). Alpha blockers, like prazosin hydrochloride and terazosin hydrochloride, effectively lower pressure, but have not attained the popularity of other antihypertensive drugs—probably because of a tendency to cause frequent and severe episodes of postural hypotension. They have a favorable effect on lipid profile, however, and do not lower potassium.

Combined alpha and beta blockers. Labetalol hydrochloride has both alpha and beta blocking effects. Therefore, it is not surprising that it has the benefits and adversities associated with individual drugs of each classification.

Calcium channel blockers (nifedipine, diltiazem hydrochloride, verapamil hydrochloride). Calcium channel blockers may work through their influence on intracellular calcium concentrations.[22] Calcium channel blockers are divided into three categories: verapamil hydrochloride, nifedipine, and diltiazem hydrochloride. Differences in these categories greatly depend on the agents' inotropic and chronotropic properties. Calcium channel blockers are well tolerated, may slow atherosclerosis, and work equally well in African-Americans and whites. Because these agents dilate coronaries and peripheral vasculature, they are quite useful in ameliorating various ischemic disorders. These agents, depending on the one chosen, are associated with constipation, headaches, and occasional edema. Specifically, verapamil is most likely to cause myocardial depression, excessive bradycardia, A-V nodal dysfunction, constipation, postural dizziness, headache, and nausea. Diltiazem is frequently associated with nausea, ankle edema, headache, and rash. Nifedipine causes flushing, headache, postural dizziness, and ankle edema. It is worth reemphasizing that these agents are useful in African-Americans and the elderly. Like ACE inhibitors, the high cost limits general usage.

Central agonists (methyldopa, clonidine, guanabenz acetate). Central agonists stimulate alpha-2 receptors in the brain, decreasing sympathetic outflow from the central nervous system. These agents include methyldopa, clonidine, and guanabenz acetate. Methyldopa has autoimmune effects that may result in a positive Coombs' test, abnormal liver function, or even severe liver disease. All the agents may cause impotency, sedation, dry mouth, and decreased mental awareness.

Direct vasodilators (hydralazine hydrochloride, minoxidil). Direct vasodilators cause vascular relaxation, lowering vascular resistance. Among the drugs in this group are minoxidil and hydralazine. Both agents are associated with increased heart rate and fluid retention, often requiring supplemental agents to overcome these adverse effects. In addition, minoxidil is associated with hirsutism. These are considered third-line agents, used more or less for refractory hypertension.

ACE inhibitors (captopril, enalapril maleate, lisinopril, benazepril hydrochloride, ramipril)

It has long been recognized that the renin-angiotensin system may play a significant role in the hypertensive process and that altering it through therapeutic means might provide an excellent result against hypertension. Renin is a proteolytic enzyme secreted into the circulation by kidneys. The chief source of production is granular-containing cells in the renal juxtaglomerular apparatus. This enzyme is capable of breaking down a circulating glycoprotein into a decapeptide called angiotensin I. On its own, angiotensin I has little physiological action, but when cleaved to an octapeptide by another proteolytic enzyme called angiotensin-converting enzyme (ACE), a very active product, angiotensin II, is formed. ACE is present in the circulation and on the endothelial surfaces of blood

vessels. Because so much is localized in pulmonary circulation, much angiotensin II is formed in the lungs. While emphasis is placed on circulatory aspects of this system, it is well known that the renin-angiotensin system is located in various organs. For example, the kidney itself can form its own angiotensin II. It is also believed that this system is significantly present in the blood vessel walls.

Accordingly, blocking formation of angiotensin II markedly affects blood pressure because angiotensin II has a number of obvious actions that influence pressure regulation. Some known actions are (a) direct constriction of arteries to increase peripheral resistance, (b) stimulation of the central and peripheral nervous systems to enhance sympathetic activity, (c) augmentation of aldosterone secretion increasing renal sodium absorption and volume expansion, (d) direct effects on renal filtration and tubular function to increase sodium reabsorption, (e) influence centers in the brain to enhance ADH (antidiuretic hormone) secretion causing water retention and direct vasoconstriction, and (f) augmentation of thirst.

Not surprisingly, inhibiting conversion of relatively inactive angiotensin I to angiotensin II via ACE-inhibition lowers pressure. It is somewhat surprising, however, that ACE inhibitors are quite effective in patients with low renin forms of hypertension, including age-related hypertension. The explanation for this may be twofold. Activity of the renin-angiotensin system in the vessels may not be reflected in plasma measurement. Even though plasma activities are low, the system located in the vasculature may be the basis for pressure elevation and may be affected by ACE inhibitors. The second reason is that ACE inhibitors influence catabolism of kinins, such as bradykinin. Concentrations of vasodilatory bradykinin are augmented by ACE inhibitors. In turn, either through direct effect or enhancement via kinins, concentrations of vasodilatory prostaglandins increase. Therefore, many pressure-lowering effects of ACE inhibitors may work by mechanisms other than those related to actions of angiotensin II.

It is worth reemphasizing that, although ACE inhibitors block production of angiotensin II, they may also reduce aldosterone secretion, increasing bradykinin and prostaglandin concentrations and decreasing responsiveness of vascular smooth muscle to sympathetic neural activity.[18,19,23] In any case, they lower pressure by decreasing peripheral vascular resistance. Most ACE inhibitors are once-a-day preparations and are well tolerated.

ACE inhibitors reduce mortality and hospitalization of patients with symptomatic congestive heart disease.[24–28] Recent evidence suggests ACE inhibitors reduce the need for hospitalization for heart failure in patients with asymptomatic left ventricular dysfunction.[28] Effects were noted as early as six weeks after initial therapy. Major side effects were hypotension, cough, and elevated serum potassium concentrations. Whether they are beneficial to cardiovascular complications following acute myocardial infarction is still controversial[29,30] and awaits further examination to determine if previous differences among studies are due to the temporal initiation of therapy and dosage.[31] Many experts suggest the use of ACE inhibitors in hypertensive diabetic patients, as the ACE inhibitors have been shown to preserve renal function and decrease insulin resistance.[32]

Cough is the most common and irritating side effect. Angioedema, although rare, is perhaps the most dangerous and may occur in 1/3,000 patients. Less common side effects include first-dose hypotensive response in patients taking vasodilators or diuretics before commencing therapy. Physicians should be aware of the possibility of hypotension in patients with low circulating blood volume, keeping the elderly in mind. Hyperkalemia may occur, especially in diabetic patients, patients with renal failure, and those taking potassium-sparing diuretics. Taste disturbance, rash, and proteinuria with introduction of these agents are less common with the newly recommended lower doses. Patients with diffuse atherosclerosis or bilateral renal artery stenosis have developed acute renal failure when given these agents. Fortunately, this is usually reversible when the agent is stopped. On the bright side, ACE inhibitors do not adversely affect sexual potency.

It is important to note that ACE inhibitors are reportedly less effective in African-Americans, but low doses of a diuretic markedly increase potency. As indicated, ACE inhibitors are quite effective in the elderly. Because of beneficial effects on heart function and the ability to reduce insulin resistance, they have been recommended as the antihypertensive of choice for diabetic patients and those with heart failure. Unfortunately, high cost often precludes usage.

Table 5. Characteristics of an ideal first-step antihypertensive drug

- ✧ Effective as monotherapy
- ✧ Easy to titrate
- ✧ Well tolerated with few side effects
- ✧ Compatible with other antihypertensive agents
- ✧ Reduces mortality and morbidity
- ✧ Minimal contraindications
- ✧ Minimal interactions with other commonly used agents
- ✧ Once-a-day dosing
- ✧ Low cost

Summary of pharmacological approaches

The current approach to pharmacological therapy is to individualize treatment to suit each patient rather than instituting a specific, rigid regimen (Step Care). Characteristics of an ideal first-step antihypertensive drug are listed in **Table 5**. In general, all antihypertensive agents

effectively lower blood pressure in the majority of patients, but certain agents work more effectively in individual patients. Today, initial therapy is based largely on (a) whether the agent is also effective in treating another medical condition (such as angina, migraine headaches, or congestive heart failure), (b) adverse reactions, and (c) cost.

Regarding secondary actions of antihypertensive agents, many hypertensive patients harbor additional disorders that may benefit from proper drug selection. Because left ventricular hypertrophy is a significant risk factor for mortality,[33,34] much attention is placed on using agents that prevent or ameliorate this disorder. Some, but not all, antihypertensive agents have the potential to prevent or reverse left ventricular hypertrophy. For patients with migraine headaches, beta blockers may be particularly useful. For angina patients, beta blockers and calcium antagonists may serve a double purpose. ACE inhibitors work well for diabetic and congestive heart failure patients. The ability of ACE inhibitors to overcome insulin resistance may aid in prevention of atherosclerosis because insulin resistance has been associated with its development. In the same vein, alpha adrenergic blockers are associated with an improved lipid profile.

On the other hand, each class of agents harbors adverse effects. Diuretics may result in mineral, salt, or water imbalances. In addition, diuretics are sometimes associated with perturbations in carbohydrate and lipid metabolism. Diuretics and some beta adrenergic blockers are associated with unfavorable lipid profiles, which may explain the inability of some early clinical trials to show a significant decrease in the incidence of coronary artery disease among patients with mild hypertension taking these agents.[7] A reason for the rapid gain in popularity of ACE inhibitors and calcium channel blockers as first-line therapeutic agents is the relative lack of significant adverse reactions compared with previously developed antihypertensive agents.

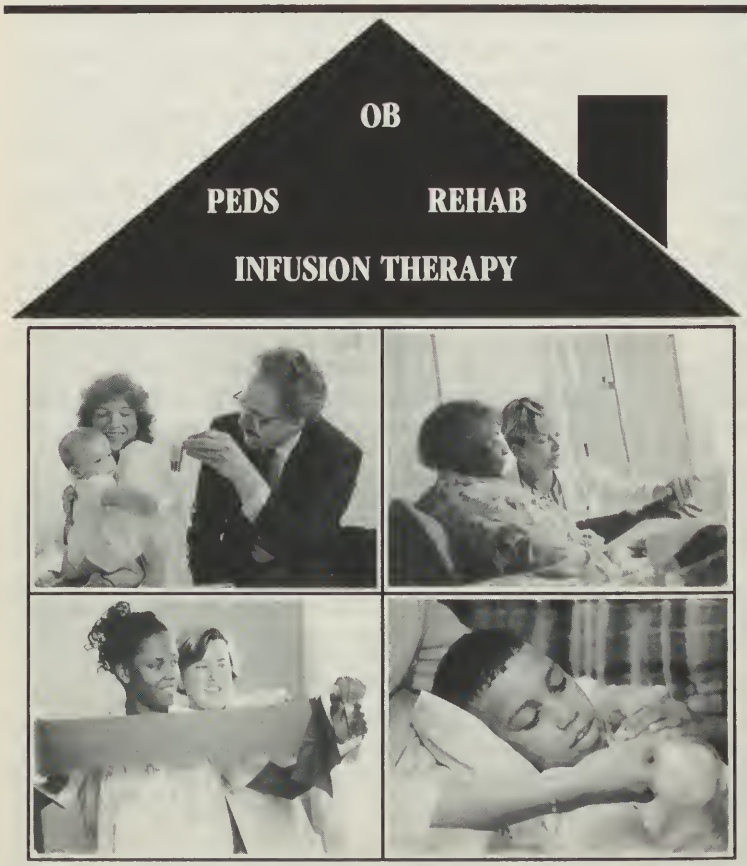
Resistance to therapy is handled by increasing drug dosage, adding additional drugs to the regimen, or substituting different agents.[35] Refractory hypertension occurs when treatment with maximal doses of two appropriate antihypertensive agents, given adequate time to be effective, have not lowered pressure to an acceptable range. It can be due to secondary hypertension, exogenous factors such as sympathomimetic agents or steroids, or biologic factors such as obesity or excess sodium consumption. These potentiating factors must be eliminated or, at least, ameliorated.

Although ACE inhibitors and calcium channel blockers are first-line therapeutic agents, their use has been limited by the relatively high cost. This is a significant consideration. Fortunately, many pharmaceutical firms are addressing this problem, by offering special pricing programs for newer agents.

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A neuropsychiatric program for HIV-infected individuals

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Dr. El-Mallakh is director, Mood Disorders Research Programs, Department of Psychiatry and Behavioral Sciences, University of Louisville School of Medicine; and Ms. Okoneski, Mr. Schapiro, and Mr. Ligay are social workers in Prince George's County.

ABSTRACT: *Designing an effective, outpatient, community-based neuropsychiatric program for persons infected with human immunodeficiency virus-1 (HIV) is challenging because the affected population is diverse. The individuals must cope with a multitude of complications while anticipating a shortened life span. Behavioral and emotional complications are common and may be reactive, idiopathic, or organic. An effective program must provide neuropsychiatric evaluations and give access to ongoing supportive and psychotherapeutic services that take into account problems unique to HIV-infected individuals.*

Neuropsychiatric evaluations were performed on 80 infected patients. The HIV-seropositive individuals (n=60) were compared with patients with acquired immunodeficiency syndrome (AIDS) (n=20) using several clinical measures. Patients in the early stages of HIV infection suffered from more frequent major depressive episodes and ongoing substance abuse than patients with advanced disease. Cognitive impairment and psychosis, however, were primarily related to AIDS.

Despite the simplicity of the human immunodeficiency virus-1 (HIV) structure,[1] the mechanisms by which it produces disease remain enigmatic. This paradox is most apparent in the clinical effects of the virus on the brain, where it can enter cells that lack CD-4 membrane receptors[2,3] and cause severe neural dysfunction with negligible neuronal infections.[4,5] Psychiatric complications in HIV-infected individuals parallel this perplexing dimension of the virus. There may be organic manifestations of HIV-related neural dysfunction,[6–8] psychological reactions to the infection or its medical consequences,[9–11] or manifestations totally unrelated to viral infection.[12,13] This picture is further complicated by a quite diverse HIV-infected

population whose demographics continue to change.[14] In addition, high risk groups often have unusual social circumstances and psychiatric needs,[9,12,15] but regardless of their risk group, many of these individuals become socially ostracized, financially devastated, physically debilitated, and cognitively impaired. Death and dying have a significant impact on therapeutic compliance.[12,16] In the face of some of these overwhelming problems, people with acquired immunodeficiency syndrome (AIDS) commit suicide at rates 21 to 36 times that of the general population.[17,18]

Due to the scale and urgency of these patients' needs, and the rapidity with which the AIDS epidemic has spread, psychosocial research efforts have focused on the late stages of HIV disease and medically hospitalized inpatients. Relatively little work has been done on the provision of adequate psychiatric services for this population in outpatient, community-based settings. This paper describes an outpatient, community-based neuropsychiatric program, and presents experience with 80 patients.

Program description

The setting. Prince George's County is located in the south-central portion of Maryland, on the eastern and southern borders of Washington, DC. The 1991 population projection for the county was 729,268, making it one of the most heavily populated political jurisdictions in Maryland. The Prince George's County Health Department, both a state and county agency, functions as a major health care institution for Prince George's County residents, providing over 250,000 patient encounters annually. The Office on AIDS, established in 1987, is one of 10 major directorates in the health department.

The neuropsychiatric program, established in 1989, is rooted in the philosophy that an individual's mental health must be viewed within the overall context of biopsychosocial systems. Guided by this philosophy, it was decided to locate the neuropsychiatric program within the Office on AIDS rather than the Mental Health Clinic. This somewhat unusual step has been a vital factor in program effectiveness.

Neuropsychiatric evaluation and psychiatric services. The neuropsychiatric program comprises three major components: (1) initial and periodic follow-up evaluations; (2) acute and ongoing pharmacotherapy and psychotherapy; and (3) extensive support services.

Possible brain involvement by HIV makes a neuropsychiatric evaluation an essential component of the routine evaluation of HIV-seropositive individuals. Evaluation begins with a comprehensive medical, psychiatric, family, and social history. Particular emphasis is placed on symptoms of major psychiatric illnesses, substance use, adjustment to HIV and its medical complications, cognitive symptoms, and current functioning level. A mini-mental-state exam[19] is conducted, in addition to the routine mental status exam. If there is a possibility of HIV brain involvement, Trials A and B (which appear to be more sensitive in detecting HIV cognitive involvement[20]) and a brief neurologic examination are also conducted. Follow-up evaluations every 6–12 months monitor cognitive functioning and psychiatric symptomatology.

Both acute and ongoing therapy are provided when appropriate, including any combination of pharmacotherapy and individual, couples, family, or group psychotherapy. Psychotherapeutic and supportive services are available for severely debilitated, homebound patients. In addition, the clinic has a wide range of supportive services including support groups for individuals with HIV or with AIDS, for women, and for family members or significant others. We created separate groups because the literature indicates that the needs and issues of various HIV-infected populations are different and are best handled separately.[16,21] Additionally, case managers coordinate medical and psychiatric care and access to entitlement and social support programs.

Patient demographics. Currently, there are 776 active cases of AIDS in Prince George's County; 488 deaths have occurred. An estimated 4,600 county residents are infected with HIV. Of the nearly 200 patients served by the Office on AIDS in fiscal year 1991, 76% were African-American and 42% were women. Over 40% had acquired their infection via heterosexual contact. Although the majority were medically asymptomatic (67%), nearly 14% had AIDS.

Eighty individuals (59 men and 29 women) underwent neuropsychiatric evaluation. Mean age was 33.7 $\pm$ standard deviation (SD) 8.4 years. Twelve people (15%) had more than one risk factor for the acquisition of HIV. The distribution across the major risk groups was as follows: 40 patients with homosexual/bisexual contact; 39 patients with nonmonogamous heterosexual contact; 20 patients who used intravenous drugs and shared needles; and 5 patients who had received blood transfusions. The mean duration of time between initial documentation of HIV antibodies and undergoing neuropsychiatric evaluation was 16 $\pm$ SD 15.6 months.

Patients were evaluated routinely as part of their overall clinic evaluation (routine group), or as referrals for recognized psychosocial difficulties or complaints (indication group). While only 7 of the 47 (15%) routine-group patients had AIDS ($z=2.14$, $p=.016$), 13 of the 33 (40%) indication-group patients had AIDS. Overall, only 20 of the 80 patients in the combined groups (25%) had AIDS, while the remaining patients had non-AIDS HIV-related medical problems (n=7) or no medical symptoms (n=53).

Results

Patients with AIDS, expectedly, had a higher incidence of AIDS-related dementia or psychosis (**Table 1**). On the other

hand, patients with early HIV disease had more treatable psychopathology, specifically, major depression and active substance abuse (**Table 1**).

As a group, the 20 patients with AIDS had a significantly lower mini-mental-state score than patients with early HIV disease (**Figure 1**). All of the difference, however, was accounted for by the 10 patients with AIDS-related dementia, mania, or psychosis. When these patients were excluded from the analysis, cognitive function as measured by the mini-mental-state exam was not different (**Figure 2**), suggesting that **gross** cognitive deterioration occurs primarily in AIDS patients with extensive brain disease.

Patients in the indication group had an average of 1.4 psychiatric diagnoses per person (**Table 2**). This is significantly higher than the 0.94 diagnosis per person in the routine group (z=3.22, p=.0006) (**Table 2**). This difference was accounted for, in part, by a significantly higher rate of AIDS-related dementia (z=2.8, p=.0026)

Table 1. DSM-III-R psychiatric diagnoses in 80 patients evaluated routinely (n=47) or for a specific psychosocial complaint (n=33)*

Diagnosis	HIV + (n=60) (%)	AIDS (n=20) (%)	p
Substance abuse, active	14 (23.3)	2 (10)	0.13
Substance abuse, remission	16 (27)	5 (25)	ns
AIDS dementia**	3 (5)	7 (35)	<.008
Major depression	8 (14)	1 (5)	0.19
Adjustment disorder	18 (30)	6 (30)	
Dysthymia/cyclothymia	3 (5)	2 (5)	
Schizophrenia	3 (5)	1 (5)	
Other	2 (4)	0	
None	7 (12)	1 (5)	ns
Total	67	24	
Diagnoses/person	1.12	1.2	

(Individuals may have more than one diagnosis.)
**Not a DSM-III-R diagnosis; includes two cases of secondary mania and two cases of psychosis.*

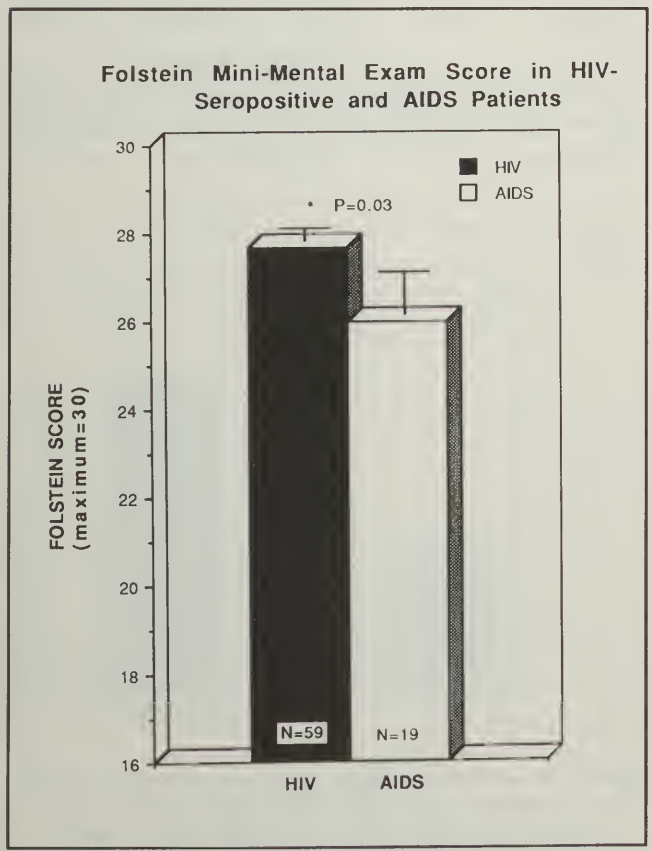


Figure 1. Patients with AIDS had significantly lower cognitive function scores as measured by the Folstein et al mini-mental-state exam.[19]

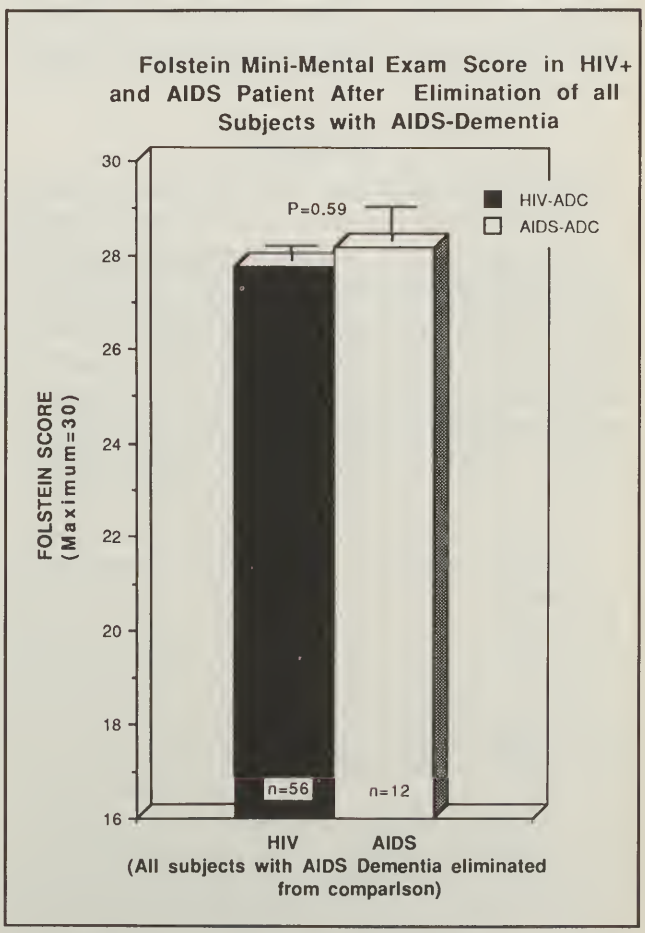


Figure 2. Excluding the 10 patients with dementia, psychosis, or mania, patients with HIV and AIDS are not different with respect to cognitive function scores as measured by the Folstein et al mini-mental-state exam.[19]

in the indication group. There was a trend for patients in the routine group to have resolved a substance abuse problem ($z=1.19$, $p=.12$) **(Table 2)**. Mini-mental-state exam scores did not differ significantly between indication-group and routine-group patients ($28.0 \pm$ standard error (SE) 0.34 vs $27.5 \pm$ SE 0.53, respectively, ns).

T-cell counts did not correlate with any of the psychiatric findings or clinical cognitive measures. T_4 cell counts, however, tended to decrease as a function of the duration of HIV infection **(Figure 3)** ($r=0.3, p<.8$). The same phenomenon was seen when T_4 cell counts were evaluated for each risk group **(Figure 4)**. Patients with heterosexually acquired HIV had the shortest duration of known HIV infection ($7.3 \pm$ SD 7.6 months, $p=.012$) and had significantly higher T_4 cell counts than either intravenous drug users ($p<.02$) or homosexual/bisexual men ($p<.001$) **(Figure 4)**. Patients with intravenous drug use or homosexual/bisexual lifestyles did not differ significantly in T_4 cell count **(Figure 4)** or duration of HIV infection ($21 \pm$ SD 15.4 months vs $18 \pm$ SD 18.0 months, respectively).

Table 2. DSM-III-R psychiatric diagnoses among 80 patients categorized by referral type*

Diagnosis	Indication group (n=33) (%)	Routine group (n=47) (%)	p
Substance abuse, active	8 (24)	8 (17)	ns
Substance abuse, remission	6 (18)	15 (32)	.12
AIDS dementia**	9 (27)	1 (2)	.0026
Major depression	6 (18)	3 (6)	.1
Adjustment disorder	11 (33)	13 (28)	ns
Dysthymia/cyclothymia	3 (9)	2 (4)	
Schizophrenia	2 (6)	2 (4)	
Total	45	44	
Diagnoses/person	1.4	0.94	.0006

Individuals may have more than one diagnosis.
"Not a DSM-III-R diagnosis; includes four cases of secondary mania or psychosis.

Discussion

In our sample of 80 patients, gross cognitive deterioration rarely occurred in early HIV disease. Furthermore, the variance in cognitive function, as measured by the mini-mental-state exam, could be accounted for by the 10 patients with AIDS-related dementia, psychosis, or mania **(Figures 1 and 2)**. Although the mini-mental-state exam provides a somewhat crude measure of cognitive status, these results, in general, agree with studies using a variety of sensitive neuropsychological measures. These studies have found that cognitive dysfunction is uncommon in early HIV infection when the subjects are compared with the appropriate control group.[7,20,22-26]

It is not surprising that individuals referred for neuropsychiatric evaluation had more psychopathology than routinely evaluated patients. It is surprising, however, that routinely evaluated patients had a significant degree of psychopathology (an average of 0.94 per person, of which 0.62 diagnosis per person was an active problem) **(Table 2)**. Forty percent of psychiatric diagnoses were related to current or past substance abuse. This is higher than the 25% of the total population that had intrave-

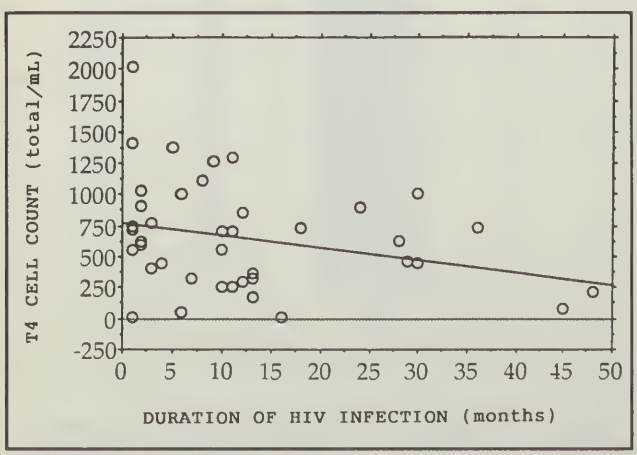


Figure 3. T_4 cell count decreases as a function of the duration of HIV infection ($r=0.3$, $p<.8$).

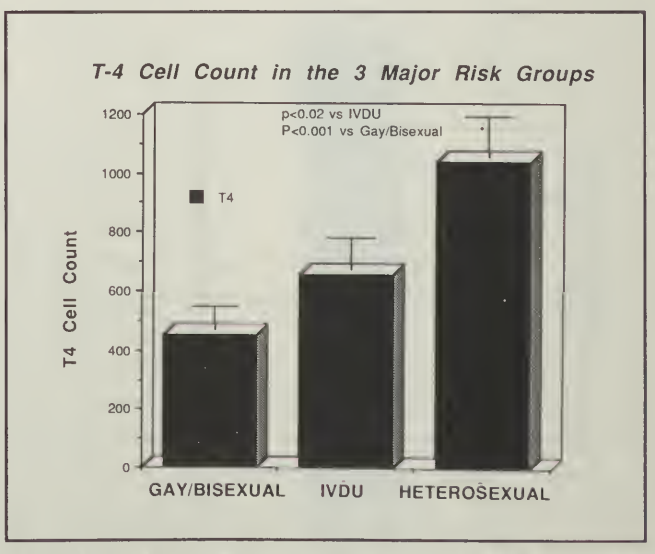


Figure 4. In our 80-patient sample, T_4 cell count is significantly higher in patients who acquired HIV by heterosexual contact. This is probably because the duration of HIV infection is shorter in this group (7 months vs > 18 months for both other groups, $p<.02$). (Homosexual/bisexual, n=34; intravenous drug users (IVDU) n=17; heterosexual, n=18).

nous substance use as a risk factor, and much higher than the National Institute for Mental Health Epidemiologic Catchment Area study rate of 3.8%. AIDS-related dementia, psychosis, and mania accounted for 11% of the total psychopathology in our study population. Other diagnoses that may have been related directly or indirectly to HIV, such as depression and adjustment disorder, accounted for 45% of the total psychiatric diagnosis.

Patients with early HIV disease had more frequent active substance abuse and major depressive disorders than patients with AIDS (**Table 1**), whereas patients with AIDS had a significantly greater rate of AIDS-related dementia, psychosis, and mania (**Table 1**). This suggests that there are more chances for positive therapeutic interventions in patients with early HIV disease.

The study findings are reminiscent of the report by O'Dowd et al.[27] Their experience in a university, consultation-liaison-based outpatient clinic, and our experience in a public, HIV/AIDS, community-based clinic, are strikingly similar. Both study populations contained similarly high proportions of women, minorities, and intravenous drug users. Invariably, and not surprisingly, the most common psychiatric problem seen in both studies was adjustment disorder occurring in conjunction with new seroconversion or new consequences of HIV infection. Both this study and that of O'Dowd et al[27] noted high rates of pre-seroconversion psychopathology. This was true in both the routine and indication populations, in which only 41% of the patients were evaluated for specific neuropsychiatric signs or symptoms, and in the O'Dowd population, in which all the patients were seen for specific psychosocial complaints.[27] The most frequent preexisting condition was substance abuse, a treatable but challenging condition. Finally, collective experience has shown that the more severely affected individuals, often those requiring medications, were the most likely to return and continue with treatment, while those actively abusing substances were the least likely to continue treatment.

In summary, our study suggests that patients with early HIV infection may have very high rates of psychosocial difficulties. A significant proportion of these problems may predate seroconversion; however, this was not directly examined in this study. Cognitive deterioration infrequently occurs in early HIV disease and appears to be closely related to severe brain dysfunction such as psychosis, mania, or dementia. HIV-infected individuals need a wide range of psychotherapeutic, evaluative, and supportive services to adequately address these issues. Our program may serve as a model for other HIV/AIDS clinics in the process of organizing neuropsychiatric services.

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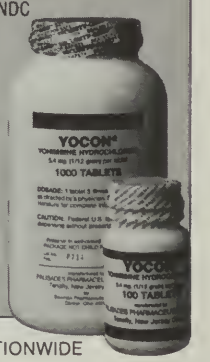
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HIV infection in Maryland public psychiatric facilities: Results of an informal survey

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ABSTRACT: *The Maryland Psychiatric Society (MPS) Public Psychiatry Committee, concerned with the preparedness of Baltimore mental health facilities to deal with the accelerating human immunodeficiency virus (HIV) epidemic, surveyed public sector mental health facilities. The survey results indicated that the number of HIV-infected patients is greatly underestimated. Care providers acknowledged awareness of the problem and wanted more education.*

The human immunodeficency virus (HIV) epidemic continues to spread rapidly. The Centers for Disease Control and Prevention (CDC) estimates that over 1% of the US population—more than 2 million persons—have been infected with the virus.[1] Over 200,000 acquired immunodeficiency virus (AIDS) cases have been reported nationwide since the beginning of the epidemic, half in the last two years.[2] Mortality from AIDS is approaching 100%.[1] In Maryland, over 4,000 AIDS cases have been reported, and it is estimated that another 16,000 Marylanders are infected.[3]

While homosexual men, intravenous drug users, and hemophiliacs still account for the majority of cases, the rate of contraction through heterosexual intercourse is increasing and now accounts for almost one-third of newly diagnosed HIV infections in Baltimore sexually transmitted disease clinics.[4]

The chronically mentally ill comprise a high-risk population for contracting HIV.[5–12] Factors making them especially vulnerable include impulsiveness, impaired judgment, self-destructive behavior, hypersexuality, cognitive impairment, poor reality testing, affective instability, intravenous drug use, vulnerability to victimization, and consequences of low socioeconomic lifestyle and environment. HIV risk behaviors in the chronically mentally ill population are alarmingly high.[5–7,10,11] Coupled with these

vulnerabilities is a disturbingly low level of patient knowledge about risk factors.[5,7,8] A recent survey reported that 43% of patients provided an incorrect response to the following true-false statement: "Women can't get AIDS if they have sex only with men."; 38% incorrectly responded to "Men can't get AIDS if they have sex only with women"; and 45% incorrectly responded to "People who give you the AIDS virus always look sick."[5] Education can help.[7-9]

The HIV prevalence rate among the chronically mentally ill is being studied. Blood sample studies in some New York City hospitals report that 5% to 8% of patients are HIV positive.[6,13] Studies also suggest clinicians were unaware of most cases, even though most HIV-positive individuals acknowledged high-risk factors.[6,10,11]

The Maryland Psychiatric Society (MPS) Public Psychiatry Committee became interested in the preparedness of Baltimore area mental health facilities to recognize and deal with HIV and its psychiatric sequelae. The committee surveyed medical directors of public-sector mental-health facilities to open a dialogue on HIV matters with local members of the profession.

Method

An eight-question, one-page survey was mailed with a stamped return envelope to medical directors of 24 inpatient and outpatient public sector mental health facilities in the Baltimore metropolitan area. Veterans Affairs facilities were inadvertently omitted. Surveys were also distributed on the Eastern Shore for comparison purposes. Committee members phoned medical directors who did not return the form within two to four weeks.

Results

Eighteen of 24 surveys (75%) were returned. Summary answers to questions are presented in **Table 1**. The estimated hospital prevalence of HIV-positive patients ranged from 0% to 2.6%; the overall rate was 2%. One of the largest state hospitals reported no HIV-positive patients.

As expected, rates from county clinics were lower than inpatient and city clinics. The vast majority of facilities appropriately recommended HIV testing to high-risk patients. While inpatient facilities reported a great deal of preparedness, outpatient facilities gave mixed responses.

Surveys were received from three county health departments and one inpatient facility on the Eastern Shore. Reportedly, no HIV-positive patients are currently being seen, and only one HIV-positive patient was hospitalized in the past. The majority of facilities and psychiatrists do not think they are adequately prepared, and all want educational programs.

At approximately the same time, another study was conducted at a small state facility in Baltimore City by Dr. David Stewart and Joan Ingle, University of Maryland Department of Family Medicine, and Samuel Groseclose and Claudia Zuckerman, Baltimore City Health Department. In that study, HIV testing on discarded blood samples of 534 patients showed an HIV-positive rate of 5.8%. Excluding children, adolescents, and outpatients, the percentage of adult inpatients with HIV was 6.8%. In our survey, the medical director of this facility

Table 1. Responses to individual questions by facility directors in metropolitan Baltimore.

	Inpatient (N=4)	Outpatient City (N=5)	Outpatient Counties (N=9)
❑ How many patients currently at your facility are known to be HIV-positive or suffer from AIDS?	27/1,477 2%	98/5,600 2%	29/6,327 0.5%
❑ Do caregivers in your facility routinely recommend HIV testing for patients who are at high risk for infection?	3 Yes 1 No	4 Yes 1 No	9 Yes 0 No
❑ Do you have special programs directed mainly at patients with HIV/AIDS?	4 Yes 0 No	2 Yes 3 No	3 Yes 5 No
❑ Do you feel that your faciltiy is adequately prepared to diagnose and treat the mental health needs of HIV patients?	4 Yes 0 No	2 Yes 3 No	5 Yes 4 No
❑ Do the psychiatrists at your facility feel adequately educated about HIV and prepared to care for HIV/AIDS patients?	4 Yes 0 No	2 Yes 3 No	5 Yes 4 No
❑ Do you feel your facility would benefit from educational programs about the HIV epidemic and the psychiatric care of infected patients?	4 Yes 0 No	5 Yes 0 No	8 Yes 1 Maybe

estimated 2.6%. Even though this was the highest estimate of prevalence by any medical director, it is still less than half (38% to 44%) the figure found by blood tests.

Discussion

Directors of state and county public-sector mental-health facilities in metropolitan Baltimore greatly underestimate the number of HIV-infected patients at their facilities. Since the infection rate is high and increasing, and since aggressive education and prevention campaigns and early treatment can make a difference, psychiatrists may be unwittingly contributing to the problem by minimizing and denying the extent of the epidemic. This is natural considering the enormity and overwhelming nature of the situation, and the personal fears it raises.

Our survey did, however, show that there was some awareness of the problem. Half of respondents reported their clinics were inadequately prepared. Half also reported that psychiatrists do not think they are adequately educated or prepared to care for HIV and AIDS patients. All respondents indicated their facilities would benefit from education programs.

Regularly updated education that teaches practical medical and psychiatric care of HIV-infected patients should be offered to public-sector psychiatrists. The AIDS services at the University of Maryland, Johns Hopkins Hospital, and the Maryland Department of Health and Mental Hygiene (DHMH) AIDS Administration are sources for education programs.

Another education option is a curriculum being developed under the direction of Carol Svoboda, through the American Psychiatric Association AIDS Education Project, which is funded by the National Institute of Mental Health (NIMH). MPS is also discussing hosting a conference in the Baltimore area.

MPS also plans support of a joint grant proposal by the University of Maryland Department of Psychiatry and the Maryland AIDS Professional Educational Center, in close collaboration with the Johns Hopkins Hospital AIDS Services, to provide training to students and practitioners at University of Maryland professional schools, DHMH facilities, and others desirous of HIV training.

Our survey addressed knowledge and awareness at public facilities. Similar issues need to be addressed at private psychiatric facilities, where confidentiality and secrecy may be greater and where the medical aspects of AIDS may, at times, be left unattended. The AIDS epidemic affects us all.

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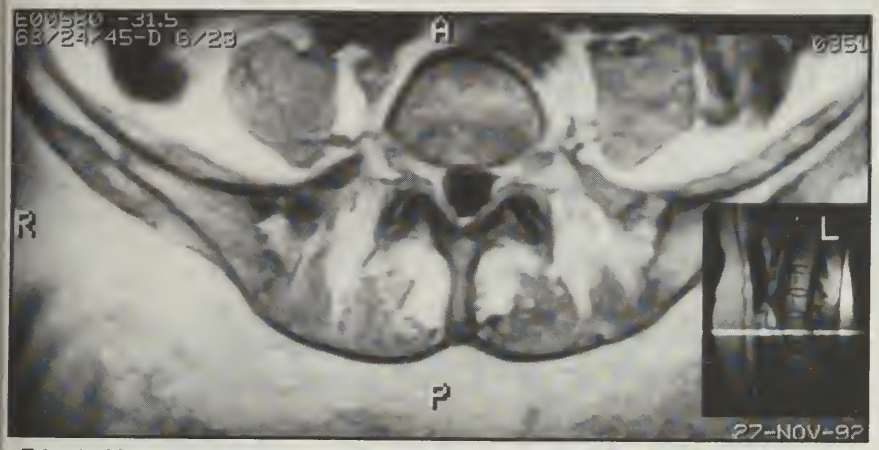
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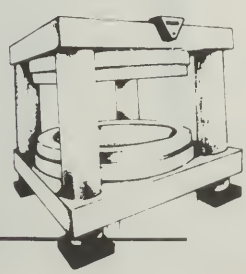
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Intravenous immunoglobulin in Henoch-Schönlein purpura: A case study

Fred J. Heldrich, M.D.; Sanford Minkin, M.D.; and Cristeta L. Gatdula, M.D.

From the Johns Hopkins University School of Medicine where Dr. Heldrich is associate professor of pediatrics, and from St. Agnes Hospital where Dr. Minkin is chief of diagnostic ultrasound and Dr. Gatdula is an attending pediatrician.

ABSTRACT: *A five-year-old girl with severe abdominal pain secondary to Henoch-Schönlein purpura (HSP) was given steroid therapy. Symptoms continued to recur. Intravenous immunoglobulin (IVGG) use was followed by cessation of symptoms. Further studies with IVGG in HSP are warranted.*

A five-year-old white female with the diagnosis of Henoch-Schönlein purpura (HSP) was admitted four times over a period of one month because of severe, recurrent abdominal pain. On the initial admission, symptoms were arthralgia with periarticular swelling involving knees and ankles, a limping gait, and purpuric lesions over the lower extremities and buttocks. Therapy was symptomatic. The three subsequent admissions were because of colicky abdominal pain, melena, and recurrence of the purpuric rash. Hematocrits, red blood cell indices, white cell count, and sedimentation rate were normal. Serum immunoglobulin G (IgG), immunoglobulin M (IgM), and immunoglobulin A (IgA), complement, electrolytes, blood urea nitrogen, and creatinine were normal. There was no hematuria. Cultures of throat and urine were negative. Occult blood in the stool and a persistent thrombocytosis as high as 824,000 was consistent with the clinical diagnosis of HSP with involvement of the gastrointestinal tract.[1]

On the second and third admissions, barium enemas and upper gastrointestinal series excluded intussusception. On the second admission, steroids were started (2 mg/kg/24 hrs); symptoms subsided after seven days, and the steroid dose was reduced to 1 mg/kg/24 hrs. Six days later, the patient experienced a recurrence of symptoms. She was readmitted, and full-dose steroid therapy reinstated. Again, symptoms abated and the steroid dose was reduced. Twenty-seven days after her illness began, there was a fourth admission for exacerbation of symptoms including colicky abdominal pain, melena, and recrudescence of purpuric skin lesions. Twenty-four hours after this admission, immunoglobulin was given intravenously (400 mg/kg/day) for four days. Symptoms subsided with no further recurrence during a year

of follow-up (**Figure 1**). Sonography prior to initiating immunoglobulin therapy revealed bowel wall thickening (**Figure 2**). A sonogram obtained the day after completion of the immunoglobulin therapy showed resolution of bowel wall edema (**Figure 3**).

Discussion

Henoch-Schönlein disease is a vasculitis of undetermined etiology, usually involving small blood vessels in various organ systems. The typical clinical presentation includes nonthrombocytic purpura, arthralgia, gastrointestinal pain with or without melena, and renal involvement.[2]

One complication of gastrointestinal involvement is intussusception. An attempt to prevent this potential complication has led to the use of steroids in HSP patients who develop intermittent, colicky abdominal pain with melena. No controlled studies demonstrate the efficacy of steroids in HSP; only favorable anecdotal experiences contribute to continued steroid use.[3] In our patient, the failure of steroids to prevent severe recurrent abdominal pain and melena led to a consideration of other therapeutic possibilities.

Intravenous immune globulin has been used in an ever-growing number of clinical diseases.[4] Notable success has been reported in Kawasaki's disease, an entity that also has vasculitis as the dominant pathologic lesion.[5,6] Although the mechanism of action for intravenous immunoglobulin therapy is unknown in patients with vasculitis as the primary pathologic entity, possible mechanisms include suppression of antibody synthesis, blockage of antiendothelial factors, modulation of inflammation, or neutralization of an unidentified infectious agent.[7] Because of this, we elected to use intravenous gamma globulin in our patient.

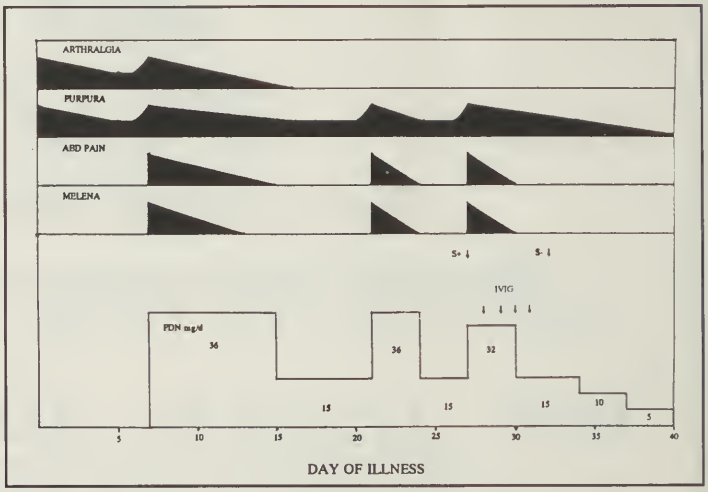


Figure 1. Clinical course showing response to prednisone and intravenous gamma globulin. Purpura, abdominal pain, and melena recurred when the prednisone (PDN) dose was tapered. The sonogram (S) was positive prior to giving intravenous immunoglobulin (IVIG), but negative 24 hours after the fourth dose. No new purpuric lesions appeared, and abdominal pain and melena did not recur.

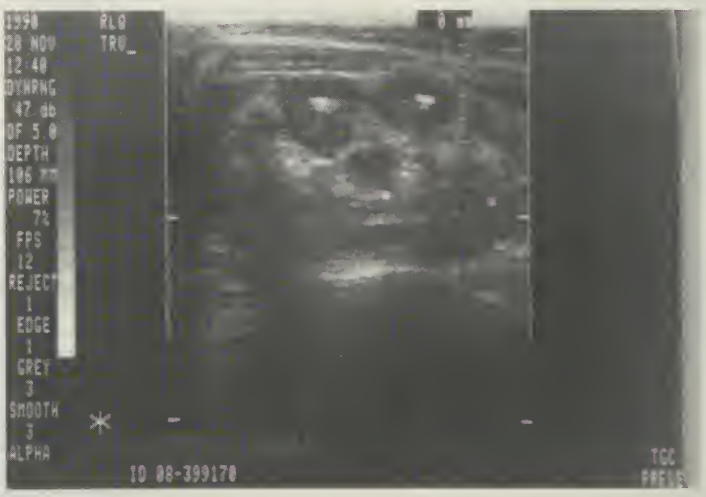


Figure 2. Transverse sonogram of the right lower quadrant on November 28, 1990, prior to the initiation of immunoglobulin therapy, with three circular lucent areas demonstrating abnormal bowel wall thickening. The abdomen was tender when pressure was applied over this area.

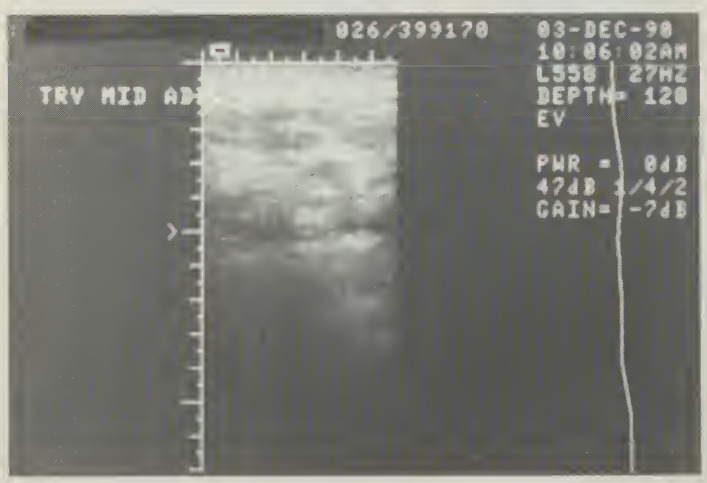


Figure 3. Follow-up sonogram of the same area as shown on December 3, 1990, the day following cessation of the immunoglobulin therapy. Normal-appearing bowel is evident.

While our experience is limited to only one patient, the objective findings of resolution of bowel wall edema on ultrasound, plus resolution of the patient's symptoms, lead us to believe that further clinical trials of intravenous immune globulin in patients with HSP are warranted.

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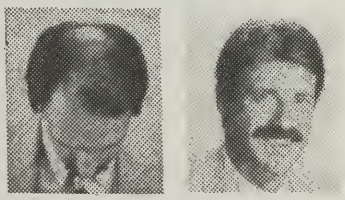
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Vignette of medical history: Queen Victoria and hemophilia

Joseph M. Miller, M.D. and K. Scott Miller, M.D.

Dr. J. M. Miller is a retired surgeon from Timonium, Maryland. Dr. K.S. Miller is an internist and clinical associate professor in Charleston, South Carolina.

Saxe-Coburg, comprising the Gotha and Coburg provinces, was a small dukedom of the first German Reich with an area of only 763 square miles on the south side of the Thuringia forest. The natives exported many of their manufactured goods, among which were meerschaum pipes and cigar holders.

The duchy sent abroad more than fabricated goods, however, as members of the ruling family made a definite effort to marry above themselves. The family was discriminatory and pursued the marriage brokerage business relentlessly. Occasionally, misfortune occurred as when, in 1816, Leopold of Coburg married Charlotte, the only daughter of George IV; she died the following year. Leopold became king of the Belgians in 1831, however, and subsequently, one of his daughters became the empress of Mexico, and a nephew married the queen of Portugal.

One of the family's great triumphs was the marriage of Queen Victoria to Prince Albert of Saxe-Coburg. Indeed, Victoria's mother, who also was a member of Coburg royalty and who carried the hemophilia trait, married the duke of Kent, the fourth son of George III, after losing her first husband. Queen Victoria was the only child of this marriage. By 1850, the impoverished House of Coburg had extended its grasp over a wide area of Europe. The duchy's ruling family reached its zenith of power in 1901 when it had provided nine contemporaneous sovereigns in Europe. Unfortunately, the family also passed on the recessive hemophilia gene with these marriages.

The genetics of hemophilia, a rare hereditary bleeding disorder caused by an abnormal X chromosome, are now well understood. In practically all instances, males express the disease, while females are the carriers. Goodman reports a prevalence of between 1.9 and 10 per 1,000 males.[1] The carrier rate is unknown.

Hemophilia is an ancient disease. Talmudic literature mentions its existence 2,000 years ago on the grazing lands between the Euphrates and the Tigris rivers.[2] Although the aged Hebrews did not leave medical texts, they did bequeath therapeutic knowledge embalmed in sacred, historical, and legal literature; the Babylonian Talmud is an encyclopedic

corpus and monument of Jewish cultural history. It was not, however, until the publication of the well-known text by Preuss, who was a well-educated doctor and brilliant Biblical scholar, that the reference to hemophilia was thoroughly documented.

In those early times, the greatest caution was exerted if a bleeding problem was expected. Rabbinical advice was that if two sons died as a result of circumcision, the operation should not be performed on a third or fourth son. The same concept applied in the case of four sisters; if one son of each of three sisters died due to circumcision, then the fourth sister's son need not be circumcised. These Jewish guidelines agreed with existing medical knowledge that such bleeding nearly always occurred in males, but was transmitted through females.

Metterlink, Victoria, and Bismark were the geographical architects and influence peddlers in Europe during the 19th century. Victoria entered the game with gusto and, because royalty could only marry royalty as morganatic marriages were frowned upon (see *Word Rounds*, page 597), this powerful individual became the grandmother of Europe. In arranged marriages, love was overshadowed by parental and governmental demand and persuasion. Victoria thereby passed her "bad" gene to many of her descendants **(Figure 1).**

Interestingly, Victoria arrived at the throne in a circuitous fashion. George IV did not have heirs, nor did his two brothers who were next in line for the throne. This brought the duke of Kent (William IV, brother of George IV) and his daughter, Victoria, to the fore. In 1825, Parliament recognized her as the successor to William IV.

Victoria and Albert had nine children between 1840 and 1857, five daughters and four sons.[3] Two daughters were known to be carriers, and one son had hemophilia from which he died. At the time of Victoria's death, 31 of her 40 grandchildren and 37 great-grandchildren were alive. As soon as any of Victoria's grandchildren became of marriageable age, she became interested in the quest for a suitable partner. Royal lines were established with Germany, Norway, Sweden, Spain, Greece, and Romania. Individuals in Great Britain, Germany, Russia, and Spain had either the trait or the disease as a result of the arranged marriages.

Hemophilia was introduced into the Romanov family by the marriage of Alice (nicknamed Alix), a granddaughter of Victoria, to Nicholas, who became the tsar of Russia.[4] Five children were born to the couple, with the first four being daughters and the last, a son with hemophilia. In March 1917, Nicholas was asked to abdicate and name Alexis, his severely ill son, as his successor under the regency of an uncle, Grand Duke Michael. At this juncture, Nicholas refused, and the Romanov dynasty was ended.

When another granddaughter, Victoria Eugenie, married Alfonso XIII, the king of Spain, the union produced seven children: five sons and two daughters.[5] Three of the sons had hemophilia, but the carrier state of the daughters is unknown.

Great changes have occurred in the diagnosis and treatment of hemophilia since the time of Queen Victoria.[6] The untoward events resulting from these marriages could have been ameliorated or perhaps even averted. Life expectancy in patients with hemophilia in the Victorian era ranged to 30 years. Today, the availability of clotting factor preparations has increased the expected life span almost to normal.[7]

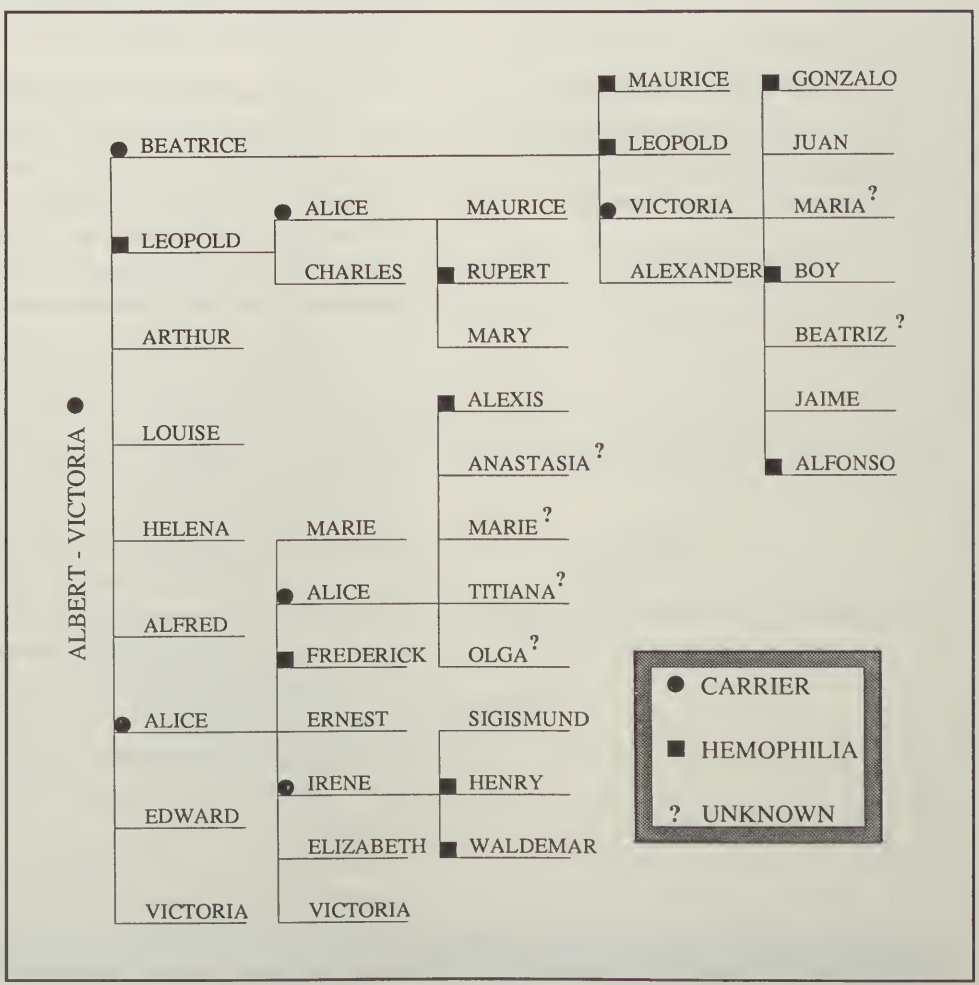


Figure 1. Descendants of Prince Albert and Queen Victoria.

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Baltimore City



Thomas E. Hunt, Jr., M.D.

THOMAS E. HUNT, JR., M.D., took office in December as president of the Baltimore City Medical Society for 1993. A native of Pittsburgh, Pennsylvania, Dr. Hunt received his undergraduate degree from West Virginia University in 1950 and his medical degree from the University of Maryland in 1954, where he also served as an intern and assistant resident in general surgery. In 1959, after completing a residency at Johns Hopkins Hospital, Dr. Hunt began his private practice in Baltimore. As an active member of Med Chi, Dr. Hunt has served on the Physician/Patient Relations Committee, as an alternate to the Board of Councilors, and as a delegate to the House of Delegates. Dr. Hunt is also a member of the American Medical Association, the American Academy of Orthopaedic Surgeons, the Maryland Orthopaedic Society, in which he has served as president and secretary-treasurer, the Eastern Orthopaedic Society, the Lister Society, the Johns Hopkins Medical and Surgical Association, and the Schmeisser Society of Johns Hopkins University. He consults for Stella Maris Hospice, the Division for Crippled Children's Services of the Department of Health and Mental Hygiene, and the Johns Hopkins Hospital Limb Prosthesis Clinic. His hospital affiliations include Johns Hopkins, Mercy Medical Center, and the Children's Hospital and Center for Reconstructive Surgery. He holds the rank of assistant professor emeritus at the Johns Hopkins School of Medicine. ▼

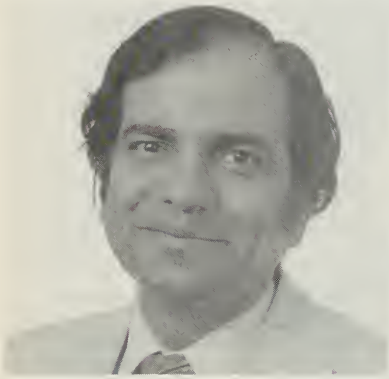
Baltimore County



Marianne Benkert, M.D.

MARIANNE BENKERT, M.D., became president of the Baltimore County Medical Association in January 1993. A native of California, she obtained her medical degree from the St. Louis University School of Medicine in 1965. She completed a rotating internship and a one-year general surgery residency at Los Angeles County General Hospital, and a psychiatric residency at the Seton Psychiatric Institute in Baltimore. Since 1970, Dr. Benkert has had a private practice in psychiatry in Baltimore. She holds privileges at Sheppard Pratt Hospital and at St. Joseph Hospital, where she has served on the Medical Education Committee, the Utilization Review Committee, and as education program director for the Department of Psychiatry. In Med Chi, she serves as a member of Council, of the House of Delegates, and of the Committee on Women in Medicine. In the Maryland Psychiatric Association, Dr. Benkert has been a member of the Executive Council, the Legislative Committee, and the Peer Review Committee, and chairperson of the Committee on Women. Prior to becoming president of the Baltimore County Medical Association, she served on the Board of Governors, the Board of Directors, and the Membership Committee; she also held the offices of treasurer, secretary, and vice president, and served as chairperson of the Peer Review Committee and of the Budget, Finance, and Personnel Committee. Dr. Benkert is a member of the American Medical Association, the American Psychiatric Society, and the Maryland Society for Adolescent Psychiatry. She is also an instructor in psychiatry at Johns Hopkins. ▼

Calvert County



Anwar Ali T. Munshi, M.D.

ANWAR ALI T. MUNSHI, M.D., assumed the office of president of the Calvert County Medical Society in January 1993. Dr. Munshi holds degrees from Jaihind College, the University of Bombay, and Grant Medical College in Bombay, India. After completing his internship and residency at J.J. Group of Hospitals and St. George's Hospital, Grant Medical College, Dr. Munshi became house physician and registrar in internal medicine at the same institution. In 1972, he continued his training in the United States, completing an internship and residency at Mount Vernon Hospital, Mount Vernon, New York, and two additional residencies at the Hospital for Joint Diseases and Medical Center in New York. As an attending physician at Calvert Memorial Hospital, Dr. Munshi has filled the posts of chief and secretary-treasurer of the medical staff, chairperson of the Department of Medicine, and member of the Medical Executive Committee. He is also attending physician at Charlotte Hall Veterans Home, consulting physician at St. Mary's Hospital, and medical director at Calvert County Nursing Center and Solomons Nursing Center. Dr. Munshi is board certified by the American Board of Internal Medicine, and board certified in geriatric medicine. He is a member of the American College of Physicians. ▼

Caroline County



Christian E. Jensen, M.D., M.P.H.

CHRISTIAN E. JENSEN, M.D., M.P.H., has been president of the Caroline County Medical Society since 1979. Dr. Jensen graduated from Duke University Medical School and earned master's degrees from Rutgers University and the Medical College of Wisconsin. He completed an internship at the Naval Hospital in Portsmouth, Virginia, and a residency in occupational medicine at the University of Cincinnati College of Medicine. He is board certified in family practice and occupational medicine. A Naval Reserve captain, Dr. Jensen is a Desert Storm veteran. In addition to his private practice, he has been medical director of the Delmarva Foundation since 1990. As a member of Med Chi, he serves on the Occupational Medicine Committee. Dr. Jensen is also a member of the American Medical Association, the Delaware State Medical Society, and the Naval Reserve Association. He is a fellow of the American Academy of Family Practice and holds master status in the American College of Occupational Medicine. Dr. Jensen farms 500 acres in Caroline County. ▼

Cecil County



Henry Farkas, M.D., M.P.H.

HENRY FARKAS, M.D., M.P.H., began his eighth term as president of the Cecil County Medical Society in January 1993. A native of New York City, Dr. Farkas attended Loyola College and Johns Hopkins University, where he received his medical degree in 1970 and his master's degree in public health in 1971. After completing his internship at Lancaster General Hospital in Lancaster, Pennsylvania, Dr. Farkas served as general medical officer on a Navajo reservation in Chinle, Arizona. Returning to Maryland in 1973, he worked as an emergency physician at Harford Memorial Hospital and as medical director for the Cecil County Detention Center. Currently, Dr. Farkas practices emergency medicine at Union Hospital of Cecil County, where he has held the posts of president of the medical staff, chairperson of the Emergency Department, and medical director of occupational health. He also serves as medical director of the Northern Chesapeake Hospice and the Medical Adult Day Care Center of Union Hospital of Cecil County. An active member of Med Chi, Dr. Farkas serves on the Peer Review Committee. He is a member and sits on the Board of Directors of the Maryland Chapter of the American College of Emergency Physicians. ▼

Charles County



Maria Luisa Tan Gatue del Rosario, M.D.

MARIA LUISA TAN GATUE DEL ROSARIO, M.D., became president of the Charles County Medical Society on January 1, 1993. A native of Manila, where she obtained her medical degree, Dr. del Rosario came to the United States in 1964. She completed an internship at Lutheran Medical Center, Brooklyn, New York, and residencies at Francis Scott Key Medical Center, Johns Hopkins Hospital, and Lawrence Memorial Hospital in New London, Connecticut. After four years of private practice in obstetrics/gynecology in the Philippines, Dr. del Rosario returned to this country, where she became research fellow at Lincoln Memorial Hosptial, Bronx, New York, and a house physician at Holy Cross Hospital in Silver Spring, also spending one year in the United States Public Health Service in Washington, DC. Since 1971, Dr. del Rosario has had a private practice in obstetrics/gynecology in Charles County. She holds privileges at Southern Maryland Hospital Center and Physicians Memorial Hospital, where she has served as department chairperson of obstetrics/gynecology for six years. In addition to Med Chi and the American Medical Association, Dr. del Rosario holds membership in numerous professional and civic organizations, including the American Medical Women's Association, the Association of Women Surgeons, the Obstetrical and Gynecological Society of Maryland, the Southern Maryland Medical Society, the Prince George's County Women's Medical Association, the Association of Philippine Physicians in Maryland, the Philippine American Association of Metropolitan DC, the Charles County Business and Professional Women's Club, Zonta International Club of Charles County, the Charles County Chamber of Commerce, the American Cancer Society, the American Heart Association, the Charles County Association for Handicapped and Retarded Citizens, and the Charles County Children's Aid Society, Inc. Dr. del Rosario's name appears in *Who's Who of American Women*, which lists those who have by their outstanding achievement contributed to the betterment of contemporary society. ▼

Dorchester County



Joseph A. Zitarelli, M.D., F.A.C.S.

JOSEPH A. ZITARELLI, M.D., F.A.C.S., recently took office as president of the Dorchester County Medical Society. Dr. Zitarelli earned his undergraduate degree at Pennsylvania State University and his medical degree at Hahnemann University School of Medicine in Philadelphia. He completed his internship and residency at Mercy Catholic Medical Center in Darby, Pennsylvania, before entering private practice in general surgery in Secane, Pennsylvania, for one year. He began his private practice in Cambridge, Maryland, in 1989. Dr. Zitarelli has held the post of chief of surgery at Dorchester General Hospital; he currently serves on the board of directors. He is also assistant director of emergency services for Dorchester County. In addition to his membership in Med Chi, he is a member of the Southern Medical Association and a fellow of the American College of Surgeons. He is a diplomate of the American Board of Surgery. ▼

Frederick County



Henry P. Laughlin, M.D., Sc.D., Sc.S.D.

HENRY P. LAUGHLIN, M.D., SC.D., SC.S.D., began his third term as president of the Frederick County Medical Society on January 1, 1993, and is the first physician to have held the office of president in both Frederick and Montgomery counties. A native of Hagerstown, Dr. Laughlin attended Ursinus College, Johns Hopkins University, and Temple University School of Medicine, where he earned his medical degree in 1941. For the next seven years, Dr. Laughlin served as a naval physician in many parts of the world. Following World War II, he maintained a private practice in psychiatry for over 40 years in the Chevy Chase, Bethesda, and Frederick areas. As an active member of Med Chi, Dr. Laughlin is associate editor of the *Maryland Medical Journal* and editor of the *Physician's Practice Digest.* He was a faculty member at the George Washington University for 35 years, the last six with the rank of clinical professor. From 1974 to 1989, Dr. Laughlin served as distinguished visiting professor at the University of Louisville School of Medicine. The recipient of numerous awards, he has an honorary Sc.D. degree from Ursinus College and an Sc.S.D. degree from the University of Louisville. Dr. Laughlin is an emeritus staff member of Suburban Hospital in Bethesda and of Frederick Memorial Hospital. ▼

Garrett County

Margaret A. Kaiser, M.D.

MARGARET A. KAISER, M.D., became president of the Garrett County Medical Society in January 1993. A native of Oregon, she graduated with honors from Santa Clara University and obtained her medical degree from the University of Oregon Health Sciences Center in 1979. She completed an internship and residency in internal medicine and primary care at the University of Maryland Hospital and Loch Raven Veterans Hospital. From 1982 to 1985, Dr. Kaiser worked as an emergency room physician, and since 1985 has had a private practice in Oakland, Maryland. In addition to her membership in Med Chi, Dr. Kaiser holds memberships in the American College of Physicians, the Wilderness Medical Society, and the American Geriatrics Society. A former member of the Board of Directors of Garrett County Memorial Hospital, she currently serves as the chief of medicine and chief of staff at that hospital and as medical director of Hospice of Garrett County and of the Cortland Acres Nursing Home in Thomas, West Virginia. Since 1979, she has served as a volunteer physician for the Sierra Club/National Forest Service Trail Crew. She is an assistant professor in the General Medicine Division of the University of Maryland School of Medicine, where she has taught since 1986. Dr. Kaiser is a diplomate of the National Board of Medical Examiners, and is board certified in internal medicine and geriatric medicine. ▼

Harford County



Brad Matthew Cogan, M.D.

BRAD MATTHEW COGAN, M.D., assumed office as president of the Harford County Medical Society on January 1, 1993. Dr. Cogan holds degrees from Colgate University and the Boston University School of Medicine. After completing his internship and residency at the Medical University of South Carolina, Dr. Cogan became an associate professor in the Department of Radiology at the University of South Alabama in 1979. He served as assistant professor of diagnostic radiology at the University of Texas System Cancer Center from 1981 to 1984, and as chief of radiology at Harford Memorial Hospital from 1984 to 1991. Currently, he is medical director and managing partner of a private radiology group practice in Bel Air, Maryland. A diplomate of the National Board of Medical Examiners, Dr. Cogan holds memberships in the American Medical Association, the American College of Radiology, the Radiological Society of North America, and the Association of University Radiologists. He is a native of New York. ▼

Howard County



Frederick G. Bergmann, M.D.

FREDERICK G. BERGMANN, M.D., assumed the office of president of the Howard County Medical Society for the second time in January 1993, having served his first term in the mid 1980s. Dr. Bergmann holds degrees from Cornell University and the Temple University School of Medicine. After completing an internship and residency at DC General Hospital, George Washington University Service, Dr. Bergmann served in the army, receiving an honorable discharge as a major in 1973. He completed a residency in urology at the University of Maryland before entering private practice in 1976. Dr. Bergmann has privileges at the University of Maryland Hospital and Howard County General Hospital, where he is chief of urology. Dr. Bergmann holds memberships in the American Medical Association, the American Urological Society, the Maryland Urological Society, and the Southern Medical Association. He is board certified by the American Board of Urology and is a fellow of the American College of Surgeons. Dr. Bergmann is a native of New Jersey.▼

Kent County



Helen Andrews Noble, M.D.

HELEN ANDREWS NOBLE, M.D., became president of the Kent County Medical Society in January 1993. A Maryland native, Dr. Noble graduated with honors from Dartmouth College in 1978 and from the Medical College of Wisconsin in 1987. She completed her internship and residency at Washington Hospital Center in Washington, DC. In addition to her membership in Med Chi, Dr. Noble is a member of the American College of Physicians, the American Society for Internal Medicine, and the American Geriatric Society. Dr. Noble holds appointments as an active staff member, chairperson of the section of internal medicine, chairperson of the Pharmacy and Therapeutics Committee, and member of the Strategic Planning Committee at Kent and Queen Anne's Hospital, and as a member of the Advisory Board of the Kent County Home Health Association. She is a diplomate of the American Board of Internal Medicine and the National Board of Medical Examiners. Her honors include the Alpha Omega Alpha Honors Society, 1987, and the American Medical Women's Association Scholarship Achievement Citation, 1987. Dr. Noble currently has a private practice in general internal medicine.▼

Montgomery County



Donald S. Stepita, M.D.

DONALD S. STEPITA, M.D., recently became president of the Montgomery County Medical Society. A native of Gary, Indiana, he obtained his undergraduate and medical degrees at Indiana University, where he also completed an internship and residency in general surgery. After completing additional residencies at the Oschner Clinic and Baylor College of Medicine, Dr. Stepita became the assistant chief of the Plastic Surgery Service at Walter Reed Army Medical Center. In addition to his active membership in Med Chi, in which he has served on the Peer Review Management Committee, the Ad Hoc Committee on Physician Licensure, and Council, Dr. Stepita holds membership in numerous other professional organizations. These include the American Medical Association; the American Society of Plastic and Reconstructive Surgery, in which he served on the Public Education Committee, Government Relations Committee, and at the 1989 and 1991 Leadership Conferences; the National Capital Society of Plastic Surgeons, in which he has held the offices of secretary-treasurer and president, and has served on the board of directors; the Columbia Clinical Society; the Alton-Oschner Surgical Society; and the Baron Hardy Plastic Surgical Society. Prior to assuming the Montgomery County Medical Society presidency, Dr. Stepita's roles included chairperson of the Board of Professional Relations, member of the Peer Review Committee and the Inter-Professional Committee, and the vice presidency. In addition to academic appointments at Walter Reed Army Medical Center and the Uniformed Services University of the Health Sciences, Dr. Stepita has made numerous professional presentations on plastic surgery. ▼

Prince George's County



Benjamin Maldonado, M.D., Jr., F.A.C.S., F.I.C.S

BENJAMIN MALDONADO, M.D., JR., F.A.C.S., F.I.C.S, became president of Prince George's County Medical Society on January 1, 1993. He obtained his medical degree from San Simon Medical School, Cochabamba, Bolivia, in 1953. He completed internships at San Simon University Hospital and Prince George's General Hospital and residencies at Glendale Hospital in Glendale, Maryland, Prince George's General Hospital, and Children's Hospital in Washington, DC. For 25 years, Dr. Maldonado has had a private practice in general surgery in Maryland and Washington, DC. He holds privileges at Prince George's General Hospital; Prince George's Doctors' Hospital, where he has served as chief of surgery, chief of staff, and chief of general surgery; Children's Hospital; Washington Sanitarium; and Southern Maryland Hospital Center. He has held teaching posts at San Simon University Hospital and with the Southern Maryland Heart Association. Dr. Maldonado is a fellow of the International College of Surgeons, the American College of Surgeons, the International Academy of Proctology, the Southeastern Surgical Association, the Pan American Medical Association, and the American Academy of Abdominal Surgeons; he is an associate in the Pan Pacific Surgical Association. In addition to Med Chi, he holds memberships in the DC Medical Society and the Washington Academy of Surgeons. He has served on the Board of Claims Commission of Med Mutual and on the Malpractice Committee and Peer Review Committee (chairperson 1987–1990) of the Prince George's County Medical Society. ▼

Queen Anne's County



John R. Smith, M.D.

JOHN R. SMITH, M.D., began his sixth term as president of the Queen Anne's County Medical Society in January 1993. Dr. Smith graduated from the University of Maryland School of Medicine and completed an internship and one year of residency at Union Memorial Hospital in Baltimore, another year of residency at the Hospital for Women of Maryland, and a fellowship in internal medicine at Johns Hopkins Hospital. In 1951, Dr. Smith entered the United States Air Force; with the rank of captain, he served as chief of medicine at the Mitchell Air Force Base in Garden City, Long Island, New York. Dr. Smith maintained a private practice in New York City between 1954 and 1960. During that time, he was an instructor in medicine at Cornell Medical School and an attending physician at the New York Hospital for Cornell medical school. Since 1960, Dr. Smith has practiced internal medicine in Centreville, Maryland. ▼

Talbot County



David A. Stout, M.D.

DAVID A. STOUT, M.D., began his second term as president of the Talbot County Medical Society in July 1992. Dr. Stout graduated from Loma Linda University Medical School, Loma Linda, California. He completed his internship and residency in pathology at the Yale–New Haven Hospital in Hew Haven, Connecticut. After two years as a surgeon for the Public Health Service, Dr. Stout began a two-year residency in clinical pathology at the National Institutes for Health in Bethesda. He served as attending pathologist at Kent and Queen Anne's Hospital and at LeLand Memorial Hospital from 1970 to 1975. Currently, Dr. Stout is an attending pathologist at Memorial Hospital in Easton. ▼

Washington County



Edward W. Lampton, Jr., M.D.

EDWARD W. LAMPTON, JR., M.D., recently took office as president of the Washington County Medical Society. A native of West Virginia, Dr. Lampton graduated from West Virginia University and the University of Maryland School of Medicine, where he was a member of the Alpha Omega Alpha Honorary Fraternity. He completed his internship at the University of Pittsburgh Children's Hospital and his residency training at the University of Maryland Hospital in diagnostic radiology. Dr. Lampton is an active member of Med Chi, serving on the Legislative Committee; the American Medical Association; the American College of Radiology, in which he is a member of the Government Relations Committee of General and Pediatric Radiology; the Radiological Society of North America; the American Institute of Ultrasound in Medicine; the Society of Breast Imaging; the Society of Ultrasound in Medicine; and the board of the Maryland Radiological Society, of which he is legislative chairperson. Currently, Dr. Lampton, who is board certified in radiology, is a staff radiologist for Associated Radiologists, P.A., in Hagerstown. ▼

Wicomico County



Gabriel John Somori, M.D.

GABRIEL JOHN SOMORI, M.D., assumed office as president of the Wicomico County Medical Society on January 1, 1993. Dr. Somori holds degrees from George Washington University, Virginia Commonwealth University, and the Medical College of Virginia. After completing his internship and residency at the Medical College of Virginia, Dr. Somori became a staff anesthesiologist at Peninsula General Hospital Medical Center in Salisbury. He served as chief of the anesthesiology department from 1987 to 1989, and as director of operating room scheduling from 1989 to the present. He also served as president of a nine-physician group practice from 1990 to 1992. A diplomate of the American Board of Anesthesiology, Dr. Somori holds memberships in the American Society of Anesthesiologists and the Maryland-DC Society of Anesthesiologists, in which he serves on the Legislative Committee. The honors he has received include Phi Kappa Phi Academic Achievement, the H. Hertzberg Award, the Upjohn Pharmaceuticals Achievement Award, and the A.D. Williams Summer Research Fellowship. Dr. Somori was born in Budapest, Hungary, and became an American citizen in 1964. ▼

Worcester County

Steven F. Waters, M.D.

STEVEN F. WATERS, M.D., entered his fourth term as president of the Worcester County Medical Society in January 1993. Dr. Waters holds degrees from Catholic University with honors, and from the Georgetown University School of Medicine. After completing a family practice residency at Franklin Square Hospital in Baltimore in 1983, Dr. Waters began his private practice in family and ambulatory medicine in Ocean City. A diplomate of the National Board of Medical Examiners, Dr. Waters holds memberships in the American Medical Association, the American Academy of Family Practice, and the Maryland Academy of Family Practice. Dr. Waters is a native of Pennsylvania. ▼

Resident Component Society



Michael Armstrong, Jr., M.D.

MICHAEL ARMSTONG, JR., M.D., 1993 president of the Resident Component Society, grew up in Richmond, Virginia. He graduated with honors from Princeton University and received his medical degree from Duke University Medical School in 1989. He has since completed an internship in general surgery and is currently an otolaryngology—head and neck surgery resident at Johns Hopkins Hospital. In addition to memberships in Med Chi and the American Medical Association, Dr. Armstrong's professional memberships include the American Academy of Otolaryngology—Head and Neck Surgery, the American Academy of Facial Plastic and Reconstrutive Surgery, and Sigma Xi Scientific Research Society. His honors and awards include Alpha Omega Alpha, a Duke Eye Center Research Scholarship, an Edward H. Benenson Merit Scholarship, and Phi Beta Kappa. ▼

Med Chi would also like to recognize those component society presidents whose biographical information was not available at press time:

- Allegany County
  Clarence Vincent, M.D.
- Anne Arundel County
  Daniel McCabe, M.D.
- Carroll County
  James Forsberg, M.D.
- Somerset County
  James A. Sterling, M.D.
- Student Component Society
  Al Dhanji

Computerized information sources: A medical sampler

As part of the Med Chi Library's ongoing efforts to bring important medical information sources to Faculty members' attention, this month's "From the Med Chi Collections" discusses three examples of the depth and breadth of medical information sources available to physicians via the personal computer (IBM-compatible or Macintosh). Using Medline as a point of comparison, this discussion provides an introduction to

- Genetic databases that offer rich, practical (and free) resources for a wide variety of clinicians—*The Genome Data Base* and *Online Mendelian Inheritance in Man*;
- A consumer health database patients may access at home or the public library that provides valuable information not available through Medline—*Health Database Plus*; and
- A "super highway" for accessing databases throughout the world—*The Internet*.

Some preliminaries. If you have not yet bought a computer, prices are now so low that cost is an increasingly flimsy excuse. For $1,000 or less, you can purchase a computer, modem, and software that will allow access to the sources described in this discussion, and more.

Once you have the hardware, you will also need a telecommunications software program, which will probably come with the computer if you ask. Depending on the databases you want to access, you will need to join an information service such as CompuServe, unless you already have access to such a gateway through an institutional affiliation.

The Genome Data Base

Maintained at the Johns Hopkins University School of Medicine, the Genome Data Base (GDB), which is available free, apart from telephone charges, contains information on genetic loci, polymorphisms, probes, and contacts, as well as references to journals, books, theses, and personal communications. One hundred editors compile the information in GDB, which is updated continuously, from the literature, other databases, human genome mapping workshops, chromosome-specific workshops, national laboratories, GDB editors themselves, and, in the future, from direct author submission. Much of the information is unavailable in any other source. Extensive reference, training, and user information is available free of charge. To obtain a password and additional information about accessing this database, call the user support number, 410-955-7058.

Online Mendelian Inheritance in Man

The Online Mendelian Inheritance in Man (OMIM) database, which is also maintained at the Johns Hopkins School of Medicine, is the full-text online version of Dr. Victor A. McKusick's *Mendelian Inheritance in Man*. OMIM is a catalog of human genes and genetic disorders. Family practitioners, internists, pediatricians, obstetricians, gynecologists, and others will find this an invaluable source for up-to-the-minute clinical information on genetic disease and disorders. It can be searched by itself or in conjunction with GDB. This knowledge base is updated daily and is free accept for telephone charges. Reference, training, and user information, as well as password and accessing information are available through the user support number—410-955-7058.

Strengths

- Unlike Medline, health professionals can use OMIM to obtain clinical synopses of covered disorders.
- Also unlike Medline, signs and symptoms can be used as search terms to locate information.
- Again, unlike the limited journal article abstracts provided through Medline, large parts of retrieved entries are frequently extensive discussions of clinical characteristics, including bibliographies.

Limitations

- OMIM is limited to single gene, Mendelian disorders. In other words, searching for "Down's syndrome" would yield information only where the information was related to single gene disorders.
- To this searcher, the search engine (e.g., the software used to search the database) is clumsy. As with any software, however, familiarity breeds ease of use.

Summary

- Whether or not they are gifted geneticists, clinicians looking for an inexpensive, up-to-date source of information on genetic disorders will find this database useful.

Health Database Plus

Health Database Plus (HDB) is a product of the Information Access Company, which also produces Infotrac™ (you may have seen Infotrac workstations in public and college libraries) and the Health Reference

Center™ (the Wheaton Public Library Health Information Center and the Health Sciences Center Library at the University of Virginia use the Health Reference Center).

HDB indexes 80+ nonprofessional journals (e.g., *Alcoholism and Drug Abuse Week*, *Cancer News*, *Harvard Medical School Health Letter*) and 80 or so professional journals (e.g., *American Family Physician*, *CA: A Cancer Journal for Clinicians*, *JAMA*, *Lancet*, *New England Journal of Medicine*). In addition to the author's abstract, the citations for the latter group of journals include a synopsis for the lay reader. Health Database Plus also allows full-text retrieval of most cited articles.

Access to HDB is available through CompuServe, an information and communication service. Costs for CompuServe and HDB are low—CompuServe basic service is $8.95/month; bibliographies on HDB can be generated without charge; and full article citations cost only $1.50 per article and summarized articles cost $1.00.

Strengths

- HDB is inexpensive and easy to use. Lay persons expect health professionals to be aware of everything lay persons know, whether or not the information has any established clinical validity. About 10% of the searches I perform for physicians deal with consumer health issues (e.g., risks to pregnant women from electric blankets). HDB provides health professionals easy, quick, economical access to consumer health information.
- HDB provides access to information not in Medline. For example, a search in the current (1989–1993) Medline file for cryosurgery in prostatic neoplasms yielded the following three English-language citations:
  - Onik G. et al. Percutaneous transperineal prostate cryosurgery using transrectal ultrasound guidance: animal model. *Urology*. 37(3):277–81, 1991 Mar.
  - Pontes JE. Salvage prostatectomy. *Progress in Clinical & Biological Research*. 303:307–13, 1989.
  - Fontana G. et al. Immunological response to prostatic cancer cryotherapy: certainties, controversies, hypotheses. *Progress in Clinical & Biological Research*. 303:299–300, 1989.

  Searching cryosurgery in HDB, however, yielded the following citations not found in Medline—all of which are more recent than those in Medline. Moreover, the full text of the articles can be called up on the spot and read or printed off:
  - "Freezing" prostate could eliminate cancer surgery. (Rush-Presbyterian-St. Luke's Medical Center), *Cancer Weekly*, March 1, 1993. p7(2). Reference # A13468978. Text: Yes (897 chars). Abstract: No.
  - New method to treat prostate cancer shows promise. (percutaneous ultrasound-guided prostate cryosurgery) (Allegheny General Hospital, Pittsburgh, Pennsylvania), *Cancer Weekly*, Dec 14, 1992. p7(2). Reference # A13039513. Text: Yes (4724 chars). Abstract: No.
  - Chilling prostate cancer. (cryosurgery) (includes related article on free screening), *U.S. News & World Report*, Oct 12, 1992. v113. n14. p84(2). Reference # A12706827. Text: Yes (7208 chars). Abstract: Yes.
  - AccuProbe is used successfully in prostate surgery. (cryosurgery system by Cryomedical Sciences Inc.) (M.D. Anderson Medical Center), *Cancer Weekly*, August 24, 1992. p6(1). Reference # A12558693. Text: Yes (1859 chars). Abstract: No.
- Searching on HDB is easy and free (apart from CompuServe connect charges), until you start pulling up the full-text or abstracts of articles cited.

Limitations

- HDB only goes back to 1989, includes nonrefereed journals and news type publications, and has only limited controlled-language searching capabilities and documentation

Summary

- Health care professionals wishing lay-oriented sources of information can access HDB easily and inexpensively, while potentially finding sources of information not available through Medline. The moderately priced full-text capability is quite useful, although it only applies to journals indexed by HDB.

The Internet

The Internet is not a distinct database, but a network of computer networks throughout the world. Designed originally by the US Department of Defense as a way to provide researchers with access to supercomputers, the Internet eventually assumed a life of its own. Most health care professionals in academic institutions and large government agencies probably know of the Internet's existence. Access, however, is quickly filtering down to the individual level, while the costs of such access are falling as well.

The Internet offers three basic functions:

1. *Access to worldwide information*

in electronic form. For example, one can access college library catalogs throughout the world, along with commercial databases that academic institutions may provide local users; and government cosponsored databases, such as PENpages, which provides agricultural and nutritional information produced by Pennsylvania State University with support from the US Department of Agriculture.

2. *File Transfer.* Internet users with file transfer protocol (FTP) capabilities can transfer software programs, graphic images, and other non-ASCII text files directly to their computers. This capability allows the user to obtain copies of electronic journals, directories, catalogs, and bibliographies. Due to the way in which these files are transferred (that is, as chunks of information rather than line by line), speeds for such transfers are lightning fast, even when using a relatively slow modem.
3. *E-Mail.* Handy though the facsimile machine may be, it is noninteractive—recipients cannot update the information received online or add it online to the text of something being prepared for publication. Facsimile machines also lack the ability to serve as a meeting point for persons with common interests. E-mail and computer bulletin boards can serve this purpose. For example, after accessing the PENpages database, a user could send an E-mail message to the PENpages system manager asking specific questions regarding PENpages content, and then check for the existence of a nutrition bulletin board in order to share ideas or obtain information from other nutritionists. Although gateways such as CompuServe have offered these capabilities for a long time, the Internet is expanding the scope by many powers of ten.

Access. There are a large number of organizations offering access to the Internet as it is not run by a single entity. Consequently, users who have a university or government affiliation should ask if it is possible to obtain an account through the organization. A large number of associations and commercial organizations also have accounts with the Internet, and members or employees may be able to obtain access through them. If all else fails, a number of communication companies offer access on a wide variety of fee bases. References to books providing information about these sources are listed below.

Summary. Efforts have long been under way to allow global linkage and access to the huge information sources existing in electronic form. The Internet is making tremendous strides toward achieving this goal.

For further information

General online searching information

- A *Basic Guide to Online Information Systems for Health Care Professionals* by Ronald G. Albright, M.D., was published in 1988 by Information Resource Press of Arlington, Virginia. It is somewhat outdated, but still provides useful introductions to the main online information sources (e.g., The National Library of Medicine/Grateful Med, CompuServe, BRS, and DIALOG).
- "Turn Your Computer into a Medical Library" by Suzanne Duke, appeared in *Medical Economics* in March 22, 1993 (70(6):231–5). It is a brief summary of databases, information exchange forums, and bulletin boards for physicians, and of gateways such as CompuServe.
- *Information Searching in Health Care* by Renee M. William et al, published in 1992 by Slack Inc. of Thorofare, New Jersey, is an introductory text written for health care professionals, with specific reference to information applications in the clinical setting.

The Internet

- *Library Resources on the Internet: Strategies for Selection and Use*, edited by Laine Farley, was published in 1992 by the American Library Association. It is a brief introduction to the subject indicated by the title.
- *The Whole Internet: User's Guide and Catalog* written by Ed Kroll and published in 1992 by O'Reilly & Associates, Inc. of Sebastapol, California, is an excellent source of general information on the Internet that also contains instructions for using the Internet once a user is connected. The book also contains a section discussing ways in which access can be obtained.

STEPHEN M. JONES, M.A., M.S.
Manager, Information Services
Med Chi Library ■

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WORD ROUNDS

Bart Gershen, M.D.

Booze, bloodshed, and bounty

In the Middle Ages, it was customary for a noble to present his wife with an extravagant gift on the morning after their wedding. In German this was known as a *morgangabe* 'a morning gift'. If the bride was a commoner or from royalty far below her husband's standing in the aristocratic community, it was understood that this gift was all she could expect from her husband. Neither she—nor any of their offspring—would ever be permitted to accede to his rank nor share in his royal legacy.

In Latin, the marriage was known as *matrimonium ad morganaticum* 'marriage based on the morning gift'. Today, it is more plainly known as a **morganatic** marriage (See "Vignette of medical history: Queen Victoria and hemophilia," page 581).

As if to emphasize the inequality between the couple, the groom offered his **left hand** to the bride during their marriage vows. Such unions were often contemptuously referred to as "left-handed marriages," which ultimately spawned the expression: "**a left-handed compliment**" (that is, an insult cloaked in thinly veiled flattery).

In the early years of the 20th century, such a morganatic marriage occurred between Archduke Francis Ferdinand—heir to the throne of Austria-Hungary—and Sophie Chotek, a mere countess. Their union would have been but a trivial footnote to European history, and of absolutely no consequence to the rest of the world, were it not for two minutes on the afternoon of June 28, 1914.

Over the preceding 18 months, the Balkan League, comprising Serbia, Bulgaria, Albania, and Greece, had defeated the Turkish Ottoman Empire. Following their success, however, the victors began to quarrel among themselves. Soon a bloody Balkan war began. Reports of atrocities between Bulgarians and Serbs were commonplace. The Russians, who had intimate connections to the Serbians, attempted, unsuccessfully, to mediate. The Austro-Hungarians were busily annexing unprotected Balkan territory.

Finally, Great Britain negotiated an armistice agreement, but it was an uneasy truce. It was at this fragile moment that the Archduke Ferdinand and his wife chose to make a state visit to Sarajevo.

Their parade route led them directly past a café called *Zeata Moruna*, the "Green Garland." Inside the café, sipping coffee, was a 19-year-old Serbian high-school student named Gavrilo Princip. A few weeks before, Princip and several of his friends had been led to a shadowy room, to a table on which was placed a skull, a gun, a bomb, and a vial of cyanide poison. There they took the oath of the Black Hand—a brutal terrorist organization led by Colonel Dragutin Dimitrijevic:

> By the sun which warms me, by the earth which feeds me, by God, by the blood of my ancestors, by my honor and by my life, I swear fidelity to the cause of Serbian nationalism, and to sacrifice my life for it.

The archduke and his wife were sitting in an open *Graf und Stift* automobile. Princip calmly approached the vehicle and fired seven shots at the occupants. The

archduke was hit in the neck and died almost instantly. Sophie, shot in the abdomen, died on the way to a hospital.

One month later, Austria-Hungary declared war on Serbia. Shortly thereafter, Russia invaded Germany, and Germany declared war on Russia and France. World War One had started.

Four years later 20 million people were dead.

Eighty years later—*deja vu*.

War, of course, is a state to which no one admits allegiance. On the other hand, it appears to be an essential human nutrient, since humankind seems incapable of existence without it.

Count the wars we list among our cherished memorabilia:

- ❑ The Assyrian War
- ❑ The Boer War
- ❑ The Babylonian War
- ❑ The Crimean War
- ❑ The Hittite War
- ❑ The Napoleonic Wars
- ❑ The Trojan War
- ❑ The War of the Roses
- ❑ The Messenian Wars
- ❑ The Spanish-American War
- ❑ The Ionian War
- ❑ The Mexican-American War
- ❑ The Peloponnesian War
- ❑ The French and Indian War
- ❑ The Alexandrian Wars
- ❑ The Russo-Japanese War
- ❑ The Punic Wars
- ❑ The Sino-Japanese War

The Arab-Israeli, Iran-Iraq, Italo-Ethiopian, Korean, Vietnam, and Persian Gulf conflicts, and World War I and II. And let's not forget the Seven Years', Thirty Years', and Hundred Years' wars. Nor should we slight the various civil wars such as the English, Chinese, Spanish, Mexican, Russian, French, Rhodesian, and American—and this is only a partial listing of the slaughter, bloodshed, and carnage for which all nations erect memorials.

I have not included the more trivial military campaigns that have inspired patriots and mesmerized throngs of faithful posterity. For example, there was the curious incident that occurred on board the British ship *Rebecca* in 1731.

Her captain was Robert Jenkins, and he had anchored for provisions in the harbor of Havana. Suddenly, the ship was boarded by the Spanish Coast Guard. There was a brief, furious fight, but the Spaniards were too many and too well armed. They captured the vessel and her crew and promptly expropriated the cargo.

Then Fandino, the Spanish captain, severed Robert Jenkins' right ear from his head—and handed it to him! Eight years later, with his desiccated ear wrapped securely in a leather pouch, Robert Jenkins stood before a hushed Parliament and told his story. England promptly declared war on Spain. The war was variously known as **King George's War** or **The War of Austrian Succession**. But most historians remember it as **The War of Jenkins' Ear**.

The first priority for England was to appoint a commander who could incisively direct strategic operations at this vast distance from London. England chose an irascible, ex-member of Parliament named **Admiral Edward Vernon**.

Vernon had an eccentric habit that prompted his famous nickname. While on deck—no matter what the weather—he always wore a long coat made of thick, coarse material that the French called *gros grain*—but the British called **grogram**.

He wore the coat in heavy gales, and in snowstorms, sleet, and hail. He also wore it at the height of the Caribbean summer. So the men, referring to the coat, nicknamed their captain **"Old Grog."**

Vernon had another idiosyncrasy, not quite as charming to the men under his command. In addition to his cantankerousness, he was downright stingy. This was evidenced by the parsimonious manner in which he distributed goods and services to the ranks. Nowhere was this more conspicuous than during the traditional happy hour, which was observed on Fridays aboard each vessel of his majesty's fleet. Rum was the customary beverage and was carefully stored along with the food, weapons, gunpowder, and other provisions.

Old Grog was not thrilled with the prospect of weekly drunken brawls on board his ship. Nor was he especially pleased at having to pay the price for rum—which came out of his budgetary allotment for supplies. So he ordered his quartermaster to cut the rum with water—a ratio of one part water to three parts rum. The men were infuriated, but could do nothing but grouse and grumble—and rename the liquid refreshment after its author.

They called it **grog**. The name has stuck to this day. In fact, after several pints of this libation one often became **groggy**—a testimony to the resilience and innovativeness of the English language. And a durable monument to an obscure despot and his coat.

But Old Grog is remembered for more than this lexical contribution. There was still the War of Jenkins' Ear to resolve. In 1739, Old Grog captured the Spanish town of Portobelo with but six ships and a small army. That achievement obliged Prime Minister Walpole to outfit an additional 100 ships and place them under Grog's authority. This fleet, transporting 27,000 men, sailed into the Spanish harbor of Cartagena in 1741. They

stormed the fort of San Felipe, but were driven back. Multiple assaults were executed during the ensuing two months. All failed.

Finally, Old Grog and his men retreated. In England, the brief glory following Portobelo diminished quickly, eclipsed by his later deplorable failure—and the crusty old curmudgeon faded into oblivion.

However, there was one interesting sidebar to this rather obscure and unimportant piece of history. During the battle at San Felipe, Old Grog formally decorated a colonial captain for exceptional heroism. His name was Lawrence Washington of Virginia, and he was half brother to nine-year-old George Washington.

Shortly after the war, Lawrence Washington left the colonial service and retired to his recently inherited plantation, which was known as Little Hunting Creek Estate. Immediately he changed the name. In honor of his former commander Old Grog, he called it **Mount Vernon**.

Edward Vernon had just moved from obscurity to perpetuity. ■

Med Chi Bicentennial Celebrations

Med Chi has already begun planning celebration activities for its bicentennial in 1999. If you have ideas or suggestions, please call Margaret Burri or Vivian Smith at 410-539-0872 or 1-800-492-1056.

COMING OUT OF THE DARK

Med Chi's Physician Rehabilitation Committee deals with the substance abuse and mental health problems of Maryland physicians, with a confidential and nondisciplinary focus...Addiction, Marital/Family Conflicts, Psychiatric Illness, Organic Impairment, Physical Handicap...If these problems exist, we can help find the solution. Call us.

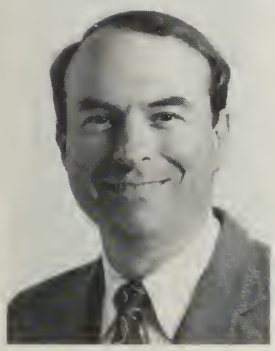
The Physician Rehabilitation Committee of Med Chi is available to all Maryland physicians, and their families. The Committee is NONDISCIPLINARY and information is kept CONFIDENTIAL. If you, a colleague, or family member is in need of our services call (410)962-5580 or call toll free (800)992-7010, or leave a message 24 hours a day, 7 days a week at (410)727-1020.

HELPING IS OUR BUSINESS...All donations to the Physician Rehabilitation Committee are used for the delivery of services to Maryland physicians in need of help. If you wish to help further the work of the Committee through a tax deductible donation send your check to: The Medical and Chirurgical Faculty Charitable/Educational Foundation, 1204 Maryland Avenue, Baltimore, Maryland 21201 Please note on your donation: "Physician Rehab"

Medical and Chirurgical Faculty of Maryland

Physician Rehabilitation Committee

Members in the News



WILLIAM A. BAUMGARTNER, M.D., has been appointed chief of cardiac surgery at the Johns Hopkins Hospital. Director of the Hopkins Heart and Heart-Lung Transplant Program since 1983, Dr. Baumgartner is known internationally as a vital part of the team that performed the first "domino donor" and heart-lung transplants at Hopkins. A professor of surgery, he received his undergraduate degree from Xavier University, his medical degree from the University of Kentucky, and served his internship and several residencies at the Stanford University Medical Center. A prolific author, he is on the editorial board of the *Journal of Heart and Lung Transplantation* and the *Journal of Thoracic and Cardiovascular Surgery.* Dr. Baumgartner is past president of the American Heart Association—Maryland Affiliate, and is active in numerous other professional associations.



BAYANI B. ELMA, M.D., has been appointed by Governor William Donald Schaefer to the Maryland Commission on Asian Pacific American Affairs. He is currently a member of the Board of Directors of Maryland General Hospital, Inc. and was past vice-chief of staff. Dr. Elma received his bachelor's degree from the University of the Philippines and his medical degree from the University of the East College of Medicine in the Philippines. He completed a rotating internship at Nazareth Hospital in Philadelphia, Pennsylvania, and a residency in internal medicine at Maryland General Hospital in Baltimore. He is currently the president of the University of the East Medical Alumni Association of America, Inc. and is past editor-in-chief of the *Alumni Newsletter.* Dr. Elma has served as a member and officer of many professional associations, in addition to serving on numerous editorial boards; he is currently on the editorial board of the *Maryland Medical Journal.* He has written articles that have been published in several publications including the *Baltimore Sun.*



STEPHEN EPSTEIN, M.D., was elected chairperson of the National Advisory Board of the National Institute on Deafness and Other Communication Disorders (NIDCD). Dr. Epstein is an otologist who is certified by the American Board of Otolaryngology, and is a fellow of the American Academy of Otolaryngology—Head and Neck Surgery and of the American College of Surgeons. Director of the Ear Center in Wheaton, Maryland, he specializes in the diagnosis and management of ear and hearing disorders in children. Dr. Epstein is associate clinical professor of otolaryngology at George Washington University School of Medicine and clinical assistant professor of otolaryngology at Georgetown University School of Medicine. Chairperson of the NIDCD Advisory Board, he is also a member of the Advocacy Committee for Early Identification of Hearing Loss, the Joint Committee on Infant Hearing, and the Maryland Advisory Council for Hearing Impaired Infants, which administers the mandated newborn hearing screening program in Maryland.

PERRY HOOKMAN, M.D., was recently awarded the Lamplighter Award, the highest honor granted by the Lubavich Jewish Religious Movement, for his ecumenical and humanitarian activities. Dr. Hookman is currently in private practice in gastroenterology and is a consultant for the Delmarva Professional Review Organization (PRO) Utilization Review. He received his undergraduate degree from the New York University and his medical degree from the State University of New York (Downstate Medical Center). Dr. Hookman completed an internship in medicine at Kings County Hospital, New York, and an assistant residency in medicine at the Johns Hopkins Hospital, Baltimore. An avid writer, Dr. Hookman is an active member of Med Chi and the Prince George's County Medical Society, and is on the editorial board of *Montgomery Medicine,* the official journal of the Montgomery County Medical Society.



KATHY L. LAMPL, M.D., was recently recognized by the American Academy of Allergy and Immunology and the Training Program Director's Committee for five years of service as a volunteer clinical faculty member in the training of allergy/immunology fellows at Johns Hopkins and the Children's National Medical Center in Washington, DC. Associate director of the Asthma Institute, Dr. Lampl has a private practice in adult and pediatric allergy in Montgomery County. She is an instructor at the Johns Hopkins University School of Medicine and an active member of the Montgomery County Medical Society; she founded the Young Physicians Committee in 1989. She received her undergraduate degree from Brandeis University in Waltham, Massachusetts, and her medical degree from the University of Pennsylvania School of Medicine. She completed her residency in 1982 at St. Lukes Medical Center in Chicago, Illinois, and was a fellow in the Division of Clinical Immunology at Johns Hopkins from 1979–1982.



DANIEL T. MCCRONE, M.D., was promoted to corporate medical director of Blue Cross and Blue Shield of Maryland on May 1, 1993, following the retirement of Arthur T. Keefe, Jr., M.D. Since 1989, Dr. McCrone had served as president and chief operating officer of Maryland Medical Services, Inc., a division of Blue Cross and Blue Shield of Maryland that provides utilization review, professional relations, and medical policy services. A graduate of the University of Cincinnati, Dr. McCrone completed his medical degree at Ohio State University College. He is a member of the Baltimore County Medical Association and has served on the Med Chi Specialty Credentialing Committee. He resides with his family in Baldwin, Maryland.



JOHN A. SINGER, M.D., has been appointed Maryland chairperson of the American College of Surgeons' Cancer Liaison Program, a part of the Commission on Cancer of the American College of Surgeons. In this capacity, he will help select and guide area cancer liaison physicians in the implementation of local cancer programs designed to improve patient care. Dr. Singer is currently the director of surgical education at St. Agnes Hospital in Baltimore and an instructor in surgery at the Johns Hopkins School of Medicine. He received a bachelor's degree in psychology from Cornell University and his medical training from the State University of New York in Brooklyn. He completed an internship at Kings County Hospital in New York and residencies at Tufts New England Medical Center, Boston, Massachusetts, and the University of Maryland Hospital, Baltimore.



WAYNE SPIGGLE, M.D., was elected to the Alpha Omega Alpha Honor Medical Society, the aim of which is to promote scholarship and research in medical schools. Dr. Spiggle, a preceptor since 1977 in the Western Maryland Area Health Education Center (AHEC) program, was selected from among 100 health care professionals who serve as preceptors in western Maryland because of his encouragement of a high standard of character and conduct among medical students and graduates. Dr. Spiggle, an internist with the Braddock Medical Group, is a clinical assistant professor of medicine at the University of Maryland School of Medicine. Dr. Spiggle received the A.H. Robins Award for Community Service in 1990 and a citation from his local Rotary Club in May 1993 for raising the most funds over the last two years for Rotary Radio Day. He was instrumental in establishing Allegany Health Right, which provides medicine to people who cannot afford medication, and has been an eloquent spokesperson for responsible waste disposal.



RICHARD M. SUSEL, M.D., was elected chairperson of the federally mandated Drug Use Review Board for the State of Maryland. Dr. Susel is an instructor at the Johns Hopkins Hospital and clinical assistant professor of ophthalmology at the University of Maryland School of Medicine. He also serves as chairperson of the Quality Assurance Committee of St. Agnes Hospital in Baltimore. Dr. Susel received his bachelor's degree from the University of Maryland and his medical degree from the University of Maryland School of Medicine. He completed his internship and residency in ophthalmology at the U.S. Public Health Service Hospital in Baltimore. He is board certified in ophthalmology and a fellow of the American College of Surgeons.



STANLEY I. WOLF, M.D., has been recognized by the American Academy of Allergy and Immunology and the Training Program Director's Committee for 40 years of service as a volunteer clinical faculty member in the training of allergy/immunology fellows at Johns Hopkins and the Children's National Medical Center in Washington, DC. Winner of the 1964 Montgomery County Medical Society Physician of the Year Award, Dr. Wolf has a private practice in adult and pediatric allergy. He received his undergraduate degree from Georgetown University and his medical degree from the Georgetown medical school. Dr. Wolf completed his internship at the University of Pittsburgh Medical Center, and a residency in pediatrics and a fellowship in allergy and immunology at the Children's National Medical Center in Washington, DC. Founder of the National Children's Center, he is also past president of the Greater Washington Allergy Society and the Montgomery–Prince George's Pediatric Society.

Erratum: *In the April "Members in the News," the photographs of Dr. Keller and Dr. Garguilo were transposed. MMJ regrets the error.*



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In Memoriam

Melvin F. Polek, M.D.

MELVIN F. POLEK, M.D., a retired physician who had been on the staff of Mercy Hospital in Baltimore, died May 20, 1993, following a car accident near his home. Born in Baltimore, he was a graduate of Loyola College and the University of Maryland School of Medicine. Early in his career, he was a staff doctor at the House of Correction, and during World War II, he served in Europe in the Army Medical Corps. A member of the Baltimore City Medical Society, Dr. Polek had maintained a general practice for 35 years in northeast Baltimore.

William A. Rinn, M.D.

WILLIAM A. RINN, M.D., 79, died suddenly of heart failure on June 5, 1993. A native of Baltimore, Dr. Rinn was a graduate of the Catholic University of America and the Georgetown University School of Medicine. The 1984 recipient of Georgetown's John Carroll Award, Dr. Rinn was a life fellow of the American Psychiatric Association and a member of the Baltimore County Medical Association. He had been director of psychiatric services at Bon Secours Hospital from 1965 until 1979, and at Catholic Charities from 1952 until 1982. He appeared on a series of WBAL-TV programs on religion and psychiatry, and was a consultant to the Marriage Tribunal of the Archdiocese of Baltimore in the 1970s. He was a lecturer at the Catholic University of America nursing school and at the Seton Institute, where he served on the staff from 1964 to 1969. He was also a staff psychiatrist at the Baltimore County Detention Center. Dr. Rinn retired from private practice eight years ago.

No information was available at press time for the following members:

Donald Q. Ekman, M.D.
(Montgomery County), April 23, 1993

Henry F. Graff, M.D.
(Washington County), April 14, 1993

William P. Houpt, M.D.
(Baltimore County)

Harry C. Hull, M.D.
(Baltimore City), December 15, 1992

Stephen Mackowiak, M.D.
(Baltimore City), February 20, 1993

Albert I. Mendeloff, M.D.
(Baltimore City), March 15, 1993

Donald J. Roop, M.D.
(Baltimore County), December 19, 1992

Gilbert E. Rudman, M.D.
(Baltimore City), March 7, 1993

William M. Seabold, M.D.
(Baltimore County), May 28, 1992

Aubrey L. Stafford, M.D.
(Affiliate), November 3, 1992

Jesse L. Wilkins, M.D.
(Anne Arundel County), January 25, 1993 ■

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AMA poised to respond to reform plan

The AMA is prepared to respond and communicate to the public, Congress and physicians once Clinton unveils his health system reform package.

AMA leaders will give Association members and patients immediate feedback and analysis of the proposal. The feedback will help them determine if the plan meets medicine's needs.

AMA strategy includes nationwide communications to physicians through an all-physician mailing that will reach the 718,000 physicians and medical students soon after the unveiling.

Also, a broad-based communications program will be executed to give the media and public AMA reaction and views on elements of the proposal. A grassroots strategy is planned for physicians and physician leaders to communicate with Congress.

American Medical Television (on CNBC) will outline the plan's impact on physicians and give physician response.

AMA publications will also compare its elements to those in the Association's own plan, Health Access America.

AMA triumphs, HCFA consultation policy reversed

Substantial AMA efforts helped reverse HCFA policies prohibiting primary care physicians from billing for pre- and postoperative consultations.

Effective June 28, the new policy eliminates distinctions between primary care physicians and specialists. It instructs carriers to use the current CPT definition of consultation in determining payments.

A letter from AMA EVP James S. Todd, MD, to HCFA said, "This policy is wrong and must be corrected."

"Current clinical practice includes numerous circumstances in which the surgeon's request to the patient's primary care physician for a pre-operative medical clearance or history and physical constitutes a request for a consultation," Dr. Todd wrote.

Prepared by the Department of Communications Services. For information, call 800 AMA-3211, ext. 4416.

Physician income poll useless, AMA says

The AMA blasted a Families United to Save America poll on physician income.

"Polls like these are devoid of useful information. It's simply scapegoating," said Thomas R. Reardon, MD, AMA trustee.

The AMA provides these helpful points to raise when asked about physician income. According to AMA data:

- Society determines the relative values of an individual's — or a profession's — contribution.
- The average physician works 60 hours a week, one-half more time than the average American's 40-hour work week.
- Physicians undergo up to 12 or more years of intense medical education, and more often do not enter practice until their early or mid-30s.
- The average medical graduate starts practice $50,000 to $100,000 in debt for that education.

"Physicians are not the engines of health care costs. Lifestyle, technology, patient demand and professional liability are key factors driving up health care costs," said Dr. Reardon.

AMA criticizes Medicare cuts

Testifying before three different congressional committees, AMA Trustee Jerald R. Schenken, MD, criticized many of the President's proposals to cut federal spending on Medicare and Medicaid programs.

The AMA urged caution, saying, "These propoals will be part of a profound series of changes that will alter forever how health care is practiced in America."

AMA Board Trustee Jerald Schenken, MD, continued, "The AMA will continue to oppose proposals that will harm our patients and splinter the medical profession. Proposals such as the RAP-DRG roll-in, the establishment of Medicaid formularies, the evisceration of the RBRVS through arbitrary reductions in the practice component and modifications of the default formula, and setting a single fee for surgical services (regardless of the value provided by an assistant surgeon) are clear examples of where medicine is united."

As an alternative, Dr. Schenken noted that "a six-month delay in all Part B updates would provide significant 1994 savings and not disrupt the achievements of RBRVS physician payment reform. This may have potentially serious consequences for many rural and inner city physicians who are barely making a go of their practices."

Prepared by the Department of Communications Services. For information, call 800 AMA-3211, ext. 4416.

WELCOME!

The Medical and Chirurgical Faculty of Maryland welcomes the new members listed below. They join an organization with a 194-year history of dedicated service to improving the health and welfare of the people of Maryland. With the help and expertise of longtime members and the participation and input of new members, Med Chi can continue its proud tradition of ensuring quality health care.

ALLEGANY COUNTY

Gonzaga, Melvin R.
925 Bishop Walsh Road
Cumberland, MD 21502
301-759-1220
AN

Rhee, Russell S.
900 Seton Drive
Cumberland, MD 21502
301-759-5009
DR; BC 080; SS 324,912

BALTIMORE CITY

Gilbert, Timothy B.
University of Maryland
22 S. Greene Street
Baltimore, MD 21201
410-328-6120
AN,CCM; BC 005; SS 636, 916, 882

HOWARD COUNTY

Langer, Kenneth F.
21 Crossroads Drive
Owings Mills, MD 21117
410-581-1600
U; BC 095; SS 708

Thompson, Glynn M.
11055 Little Patuxent Parkway
Columbia, MD 21044
410-730-6673
OBG

MONTGOMERY COUNTY

Ajrawat, Satinder K.
7605 Persimmon Tree Lane
Bethesda, MD 20817
301-772-3434
AN; BC 005; SS 636

Berger, Ira L.
Rockville Internal Medicine Group
809 Veirs Mill Road
Rockville, MD 20851
301-762-5019
IM; BC 020; SS 312,696

Betesh, Elliott L.
19537 Doctors Drive
Germantown, MD 20874
301-540-8800
OBG; BC 030; SS 300

Bobrow, Philip D.
5530 Wisconsin Avenue
Suite 604
Chevy Chase, MD 20815
301-657-9876
ORS; BC 040

Faulconer, Elizabeth M.
Chestnut Lodge Hospital
500 W. Montgomery Avenue
Rockville, MD 20850
301-424-8300
P; SS 516

Friedlander, Gary S.
15225 Shady Grove Road
Suite 307
Rockville, MD 20850
301-258-1919
U

Kator, Nancy N.
10313 Georgia Avenue
Silver Spring, MD 20902
301-681-9101
OBG; BC 030; SS 300

Koch, Barbara M.
Children's Hospital
111 Michigan Avenue
Washington, DC 20814
202-745-3080
PD, PMR; BC 055,060; SS 144

Marino, Gail A.
2121 Medical Park Drive
Suite 6
Silver Spring, MD 20902
301-651-0771
GE; BC 020

Miller, Kenneth D.
18111 Prince Philip Drive
Olney, MD 20832
301-774-6136
HEM,ONC; BC 020,206; SS 312

Norman, Brad H.
9801 Georgia Avenue
Suite 224
Silver Spring, MD 20902
301-593-8101
OBG; BC 030; SS 300

Sato, Takao L.
MD Office of Clinical Research
2440 Research Blvd.
Rockville, MD 20850
301-990-0030
GE, IM; SS 312

Storella, Janet M.
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301-951-4155
DR; BC 080; SS 912,588,324

Vincent, Michael P.
9715 Medical Center Drive
Suite 315
Rockville, MD 20850
301-948-5670
PS, GS; BC 065,085; SS 336,672

PRINCE GEORGE'S COUNTY

Araminowicz, Dorota L.
4520 King Street
Suite 208
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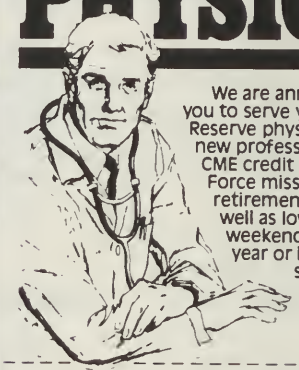
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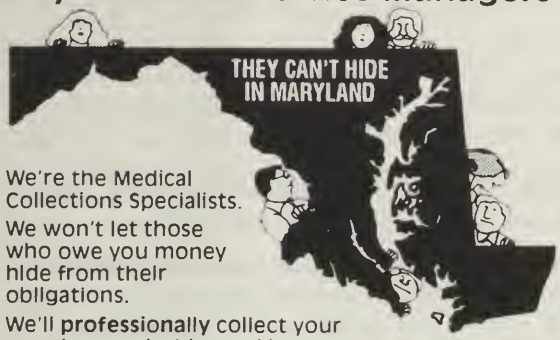
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  1. Stevens MB. The clinical spectrum of SLE. Md Med J 1991; 10:875–85.
  2. Ropes MW. Characteristics, manifestations, and pathologic findings. In: Ropes MD, ed. Systemic Lupus Erythematosus. Cambridge, MA: Harvard University Press. 1976; 50–4.

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Checklist

- ☐ Original manuscript and one copy.
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Miscellaneous meetings

11th summer symposium in internal medicine, at the Fort Magruder Inn & Conference Center, Williamsburg, Virginia. Info: 804-446-6140. **June 25–27**

16th annual flap dissection workshop, at the Virginia Beach Conference Center, Virginia Beach, Virginia. Info: 804-446-6140. **July 6–10**

Imaging the augmented breast, sponsored by the Baltimore City Medical Society. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. **Sept. 2**

1993 Med Chi semiannual meeting, at the Sheraton Ocean City Resort and Conference Center, Ocean City, Maryland. Info: Vivian Smith, 410-539-0872 or 800-492-1056. **Sept. 10–12**

The decade of the brain: An international conference, sponsored by the George Washington University, at the Omni-Shoreham, Washington, DC. 28 Cat 1 AMA/PRA credits. Info: John F. Vargo, 202-994-4285. **Sept. 11–14**

5th annual trauma conference, sponsored by the Peninsula Regional Medical Center, at the Sheraton Ocean City Resort and Conference Center, Ocean City, MD. Info: Darlene Kwiatkowski, 410-543-7328. **Sept. 16–17**

14th international congress of lymphology, sponsored by the International Society of Lymphology (ISL). Part 1: "Frontiers in Lymphology" at the Hyatt Regency, Baltimore, Maryland. Part 2: "Lymphology in 1993" at the Ramada Renaissance Techworld, Washington, DC. Info: Grace Wagner, Program Coordinator, 602-626-6118. **Sept. 20–26**

International liver symposium, sponsored by the George Washington University, at the Marriott Crystal Gateway Hotel, Arlington, Virginia. Info: Daniel E. Reichard, 202-994-4285. **Oct. 1–3**

Causes of the medical malpractice crisis, sponsored by the Baltimore City Medical Society. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. **Oct. 7**

Gastroenterology board review course, sponsored by the George Washington University, at the Marriott Crystal Gateway Hotel, Arlington, Virginia. 42 Cat 1 AMA/PRA credits. Fee: $625 physicians; $500 residents and fellows. Info: Daniel E. Reichard, 202-994-4285. **Oct. 9–13**

Medical oncology board review course, sponsored by the George Washington University, at the Ritz-Carlton, Pentagon City, Virginia. Info: John F. Vargo, 202-994-4285. **Oct. 9–13**

Cancer in women conference, at the Greater Baltimore Medical Center (GBMC), Baltimore, Maryland. Info: Celeste Morrissey, 410-828-3670. **Oct. 21 & 28 and Nov. 4 & 11**

Vascular radiology conference, at the Greater Baltimore Medical Center (GBMC), Baltimore, Maryland. Info: Celeste Morrissey, 410-828-3670. **Oct. 23**

7th annual national disability management conference and exhibit, sponsored by the Washington Business Group on Health, at the Crystal Gateway Marriott, Arlington, Virginia. Info: Kristina Tanasichuk, 202-408-9320. **Oct. 25–26**

Cardiology in women, at the Greater Baltimore Medical Center (GBMC), Baltimore, Maryland. Info: Celeste Morrissey, 410-828-3670. **Oct. 29**

Continuously throughout the year

Fluorescein angiography conference, sponsored by the Retina Center, St. Joseph Hospital, Baltimore, Maryland, first and third Mondays of each month; 8:00-9:00 am. Fee: none. Info: R. Classon, 410-337-4500.

The Johns Hopkins Medical Institutions

All courses at the Thomas B. Turner Building unless otherwise indicated. For information on continuing medical education activities, contact the Office of Continuing Education, 720 Rutland Ave., Baltimore, Maryland 21205 (410-955-2959).

Control of biohazards in the research laboratory, at the Hampton House Auditorium. Info: Dr. Jacqueline Corn or Linda Lamb, 410-955-2609.	**June 21–25**
Coordination and monitoring of clinical trials. Cat 1 AMA/PRA credits available.	**July 8–9**
Symposium on bone marrow transplantation—Current concepts and future directions. 7 Cat 1 AMA/PRA credits. Fee: $40.	**July 16**
2nd annual update on obstetric anesthesia plus an optional fiberoptic airway management workshop, at the Hyatt Regency Inner Harbor, Baltimore, Maryland. 12 Cat 1 AMA/PRA credits. Fee: $275 physicians; $175 CRNAs; $75 residents and fellows.	**Aug. 21–22**
Pediatrics for the practitioner—Update 1993. Cat 1 AMA/PRA credits available. Fee: TBA.	**Sept. 9–10**
7th annual core content of emergency medicine: A comprehensive review, at the Marriott Hotel, Baltimore-Washington International Airport, Baltimore, Maryland. Cat 1 AMA/PRA credits available. Fee $995.	**Sept. 10–16**
22nd annual diagnostic ultrasound in gynecology and obstetrics and abdomen, at the Stouffer Harborplace Hotel, Baltimore, Maryland. 16.5 Cat 1 AMA/PRA credits. Fee: physicians: 3 days, $400; 2 days, $300; 1 day, $150.	**Sept. 17–19**
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Diabetic retinopathy. 8 Cat 1 AMA/PRA credits. Fee: $200 physicians; $100 residents, fellows, and allied health professionals. **Oct. 29**

Practical management of the uveitis patient. 8 Cat 1 AMA/PRA credits. Fee: $200 physicians; $100 residents, fellows, and allied health professionals. **Oct. 30**

Ethics and politics related to clinical trials. Cat 1 AMA/PRA credits available. Fee: TBA. **Nov. 3–4**

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Births, Infant & Maternal Deaths, and Abortions--Maryland, 1980-1989

June 1993

Contributed by Norma Kanarek, Ph.D., Director, Office of Planning, Evaluation and Program Development, Russell Moy, M.D., Director, Office of Maternal Health and Family Planning, Local and Family Health Administration and Estelle Apelberg, Research Statistician, Division of Vital Statistics, Department of Health and Mental Hygiene

Births

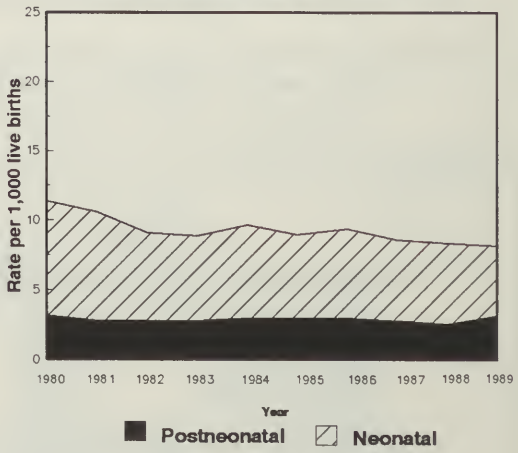
In 1989, 78,225 births were recorded among Maryland residents. Eighty-six percent of infants were delivered within Maryland. The majority of births (83%) outside Maryland occurred in Washington D.C.

Births have increased an average of 2.7% annually for the last ten years. In 1980, 59,833 births were registered. Since 1980, the percent of infants who were delivered in Maryland (84% in 1980 vs 86% in 1989) and by physicians (99.4% vs 98.3%) has increased. The fertility rate has also increased though at a slower rate, since 1980 (57.4/1000 in 1980 vs 66.1 births/1000 population in 1989). Birth rates have increased among mothers of every age with the rate among women $\geq$ 35 years old, having doubled during these ten years. Nearly ten percent of all births in 1989 were to mothers 35 and older (see Table 1).

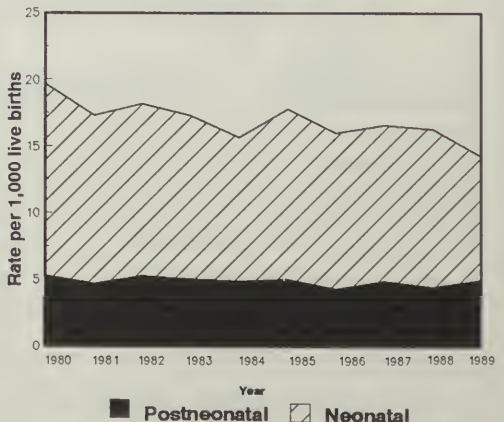
Infant Deaths

There has been a steady decline in the Maryland infant mortality rate throughout the decade of the 80's (Figure 1). Between 1985 and 1989 deaths before age 1 have averaged 823 per year. About two-thirds of the infant deaths occur in the first 28 days of life (neonatal). Over the decade, there has been a steady decline, for both races, in the neonatal mortality rate and in the proportion of all deaths occurring during this period of

Figure 1: Neonatal and Post-neonatal Mortality Among Whites, Maryland, 1980-1989.

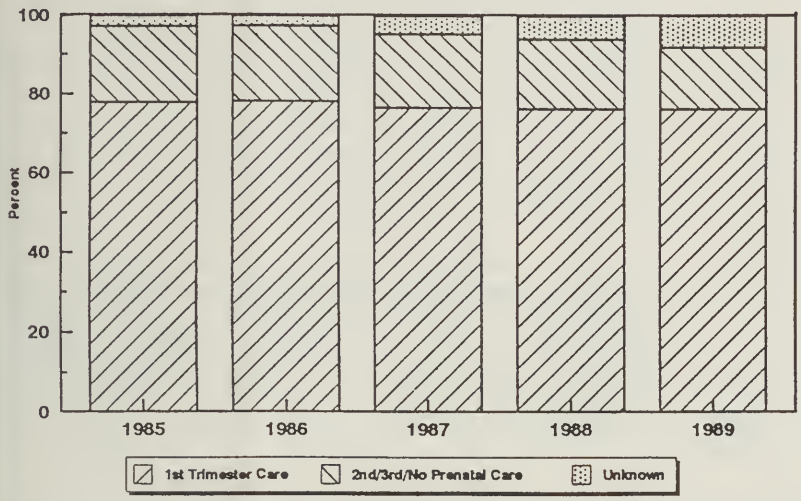


Neonatal and Post-neonatal Mortality Among Nonwhites, Maryland, 1980-1989.



Source: MD DHMH Division of Health Statistics
***1989 Race of Mother is used to classify race of births**

Figure 2: Trimester of Prenatal Care, Maryland, 1985-1989



life. Postneonatal mortality started the decade at 3.9 deaths/1000 births and ended at 3.8/1000. The ratio of white to nonwhite infant mortality remained at about 1.75 throughout the decade.

Prenatal Care

Approximately three-fourths of births had early prenatal care (Table 1). Even so, prenatal care during the first trimester of pregnancy decreased between 1985-1989 (Figure 2). The unknown prenatal care category has tripled during this period. This probably indicates a change in reporting rather than a decline in early care or postponement of care. Health Department monitoring of this group at high risk of infant mortality is hampered by the large number of mothers with unreported prenatal care. Mothers with no care have increased from 0.8% to 1.1% during this period, an increase in a very high risk group of births.

Percent Low Birth Weight

During the 1980's, Maryland exceeded the U.S. on percentage of births which are under 2500 grams. Further, the percentage has increased annually since the decade low of 7.6% in 1985 (Table 1). This pattern is similar within races. This trend is also consistent with the excesses observed in Maryland's neonatal death rate. Perhaps as many as three quarters of all infant deaths occur among infants of low birth weight.

Teen Births

While the portion of births to mothers under 18 years old has decreased, the teen fertility rate increased between 1985-89 (Table 1). The rate of births to teens 15-17 was 13.9/1000 females in 1989, almost equal to the 1988 rate. The number of teens under age 15 giving birth has averaged 240 per year for 1985-89.

Jurisdictional Measures

The majority of Maryland births occur among the largest jurisdictions - Baltimore City (18%), Prince George's County (17%), Montgomery County (12%), Baltimore County (13%), and Anne Arundel (9%). The metropolitan areas of Maryland have 81% of the births with a small proportion in Western Maryland (7%), Eastern Shore (5%), and Southern Maryland (7%).

Poor birth outcomes cluster in Baltimore City and Prince George's County. A few of the small rural counties also have high rates of infant mortality, low birth weight, no prenatal care, and teen pregnancy (Table 1).

Maternal Deaths

Deaths related to pregnancy are rare and vary in their occurrence and the extent to which they are reported. Between 1985 and 1990 there were 3 to 11 maternal deaths reported per year (Table 2). No year has significantly more (or less) than expected. The DHMH estimates that death certificate reporting captures approximately 50% of maternal deaths, as is true throughout the U.S. In 1989 and 1990, three quarters of the pregnancy-related deaths were among nonwhite mothers.

Table 2. Maternal Deaths

	# Reported	# Expected*
1990	4	6.5
1989	11	6.2
1988	5	6.1
1987	3	4.8
1986	6	5.0
1985	3	5.3

*U.S. maternal mortality rate was applied to MD births

Abortions

Abortion surveillance, begun in 1970, is a *voluntary* system of providers reporting therapeutic abortions. In 1991, 18,095 abortions were reported obtained by Maryland women.

The majority of women obtaining an abortion were:

* not married (77%)
* urban residents (91%)
* age 18 years old or older (91%)

The majority of abortions are done:

* before 13 weeks gestation (94%) and
* by suction D & C (98%)

The median age of women having abortions is rising--from 21 years old in 1980 to 24 years in 1991. The percentage of abortions and births to females over age 25 has increased (Table 3).

Table 3. Births and Abortions by Age

	1980	1991
Percentage of births after age 25	54%	65%
Percentage of abortions after age 25	29%	45%

Conclusion: Reporting Needed

These data point out the need for accurate and complete reporting of births, deaths, and abortions. Birth and death certificates are mandated reports of vital events to be completed and submitted within 72 hours of the event. Not only must the legal portion of the certificate be filled out, but also the section containing confidential medical and health information must be completed in full. This portion of the birth certificate provides most of the measures essential to monitoring the health of infants and mothers. The cited cause of maternal death is frequently a non-pregnancy related designation. Physicians must be very specific and list any condition, including pregnancy, which is relevant to the death.

While abortion reporting is still voluntary in Maryland, reporting all abortions is encouraged. This reporting will enhance vital statistic's capacity (e.g., in distinguishing a therapeutic abortion outcome from fetal or infant death) and will provide data such as teen pregnancy rates and abortion to birth ratios.

Tips for Vaccine Adminstration, March 1993: Errata

Errata: In the "Tips for Vaccine Administration" article in the March edition of the Epidemiology and Disease Control Newsletter, Table 1. Recommendations for vaccinations by route of administration, is incorrect regarding the administration of rabies and typhoid vaccines. The table below is correct and should be used to replace Table 1 in the original article.

Table 1. **Recommendations for vaccinations by route of administration**

	IM	SC	ID	Oral
Vaccine(s)*	DTP, DTaP, DT, Td, Tetanus(adsorbed), Hib, Influenza, HBV, Rabies (pre- or post-exposure), Pneumococcal	MMR, eIPV, Pneumococcal, Typhoid fever (injectable-primary series 1&2)	PPD Mantoux, Rabies(pre-exposure), Typhoid fever (injectable-booster)	OPV Oral typhoid fever
Sites	Arm: deltoid muscle Leg: vastus lateralis	Outer aspect of upper arm or fatty area of anterior lateral aspect of thigh	PPD:inner forearm Rabies(pre-exposure) and Typhoid:outer aspect of upper arm	By mouth
Insertion angle	90° (perpendicular)	45°	5° to 15°	
Needle size	1", 22 or 23 gauge; ⅝", 25 gauge may be used if long enough to reach the substance of the muscle in infants	⅝", 25 gauge	½" or ⅝", 25 or 27 gauge	

* Abbreviations: Diphtheria-pediatric (D), Tetanus (T), Pertussis (P), Acellular Pertussis (aP), diphtheria-adult (d), Haemophilus influenzae type b (Hib), Hepatitis B (HBV), Measles Mumps Rubella (MMR), Oral Polio (OPV), Enhanced Inactivated Polio (eIPV); though not a vaccine, Purified Protein Derivative (PPD) is included as a commonly used injectable.

TABLE 1. SELECTED NATALITY AND INFANT MORTALITY MEASURES; MARYLAND 1985 - 1989 AND COUNTIES 1989

	Number of Births		Fertility Rates		Infant Mortality Rates ***					Trimester Prenatal Care Began (Percent)			Percent Low Birth Weight		
Residence	Total	Mother 15-17 Yrs Old	General* Fertility Rate	Teens ** (<18)	Total	Neonatal	Post-Neonatal	White	All Other Races	First	No Care	Unknown	Total	White	All Other Races
MD State															
1985	67,985	2,944	62.1	12.7	11.9	8.2	3.7	9.0	17.8	77.8	0.8	2.6	7.6	5.4	12.0
1986	69,524	2,956	62.3	13.0	11.7	8.2	3.5	9.4	16.1	78.1	1.0	2.6	7.7	5.5	12.0
1987	72,501	3,013	63.8	13.4	11.4	7.8	3.6	8.6	16.6	76.6	0.9	4.7	7.8	5.5	12.1
1988	76,414	3,103	65.7	14.0	11.2	7.9	3.3	8.4	16.3	76.3	1.2	6.0	8.1	5.9	12.3
1989	78,225	3,036	66.1	13.9	10.4	6.5	3.9	8.1	14.9	76.2	1.1	8.1	8.0	5.9	12.3
Northwest	5,184	172	60.8	9.2	6.4	4.2	2.2	6.0	12.5	83.7	0.3	4.1	5.8	5.3	14.1
Garrett	389	17	62.8	11.3	10.3	7.7	2.6	10.3	-	80.7	-	1.8	6.9	7.0	-
Allegany	870	40	54.4	11.0	6.9	3.4	3.5	7.1	-	80.6	1.1	1.6	4.9	4.7	14.3
Washington	1,619	59	62.1	10.2	8.0	6.2	1.8	7.8	12.8	83.1	0.3	6.3	6.4	5.5	23.1
Frederick	2,306	56	62.3	7.2	4.3	2.6	1.7	3.4	13.7	85.8	0.1	3.8	5.6	5.0	11.0
Baltimore Metro	38,320	1,817	66.7	17.2	11.0	6.7	4.3	8.1	16.7	75.5	0.9	8.7	8.6	6.0	13.8
Baltimore City	13,886	1,253	75.8	37.8	14.1	8.4	5.7	7.4	17.1	63.1	1.8	12.3	12.4	7.1	14.8
Baltimore County	9,935	219	59.9	7.6	10.0	6.0	4.0	9.1	14.3	83.2	0.4	5.2	7.1	6.4	10.8
Anne Arundel	6,736	192	65.0	9.5	9.9	6.5	3.4	8.0	19.9	79.0	0.4	9.8	6.6	5.3	13.0
Carroll	2,012	43	68.7	6.7	9.4	5.0	4.4	9.1	22.7	87.5	0.4	3.3	5.6	5.5	6.8
Howard	2,907	39	59.8	4.5	4.8	3.4	1.4	4.4	7.6	84.0	0.3	9.4	5.3	4.8	8.7
Harford	2,844	71	64.8	7.4	9.8	5.3	4.5	9.1	15.6	84.0	0.3	3.6	6.4	5.6	12.5
National Capital	25,602	650	65.4	10.0	10.3	6.8	3.5	8.2	13.2	76.7	1.5	9.0	7.8	5.7	10.6
Montgomery	12,665	182	66.8	5.7	7.7	5.4	2.3	7.1	9.5	84.9	0.7	4.8	6.0	5.2	8.4
Prince George's	12,937	468	64.2	14.0	12.8	8.3	4.5	10.0	14.7	68.6	2.2	13.1	9.6	6.7	11.5
Southern	3,995	140	71.3	11.1	10.0	5.3	4.7	9.8	10.9	73.0	1.0	7.1	7.5	6.4	11.4
Calvert	839	24	68.3	8.4	6.0	3.6	2.4	6.1	5.4	77.0	0.6	4.8	7.4	6.3	11.4
Charles	1,754	56	69.3	9.7	9.7	4.0	5.7	9.6	10.1	77.0	1.7	4.3	7.0	5.6	11.8
St. Mary's	1,402	60	75.9	15.0	12.8	7.8	5.0	12.1	16.5	65.5	0.5	11.9	8.1	7.5	10.7
Eastern Shore	5,124	257	67.0	15.9	10.0	7.2	2.8	3.9	13.5	73.4	0.9	4.9	7.4	6.0	12.3
Cecil	1,183	42	70.9	10.5	8.5	3.4	5.1	8.8	-	80.7	0.5	3.3	6.9	6.6	13.7
Kent	241	10	61.8	14.5	8.3	8.3	-	5.5	16.7	77.2	-	5.4	7.1	5.0	13.3
Queen Anne's	480	20	64.6	12.0	4.2	2.1	2.1	4.8	-	77.7	0.8	6.9	5.4	4.8	9.4
Caroline	393	26	66.3	18.8	15.3	10.2	5.1	16.2	11.8	77.9	0.5	4.3	6.4	4.5	12.9
Talbot	408	18	66.3	16.5	12.3	9.8	2.5	3.3	39.2	77.7	0.5	3.4	9.6	6.2	19.6
Dorchester	457	38	70.1	26.7	4.4	4.4	-	7.2	-	71.3	1.5	3.1	8.3	5.1	13.3
Wicomico	1,134	52	63.6	15.9	11.5	7.9	3.6	10.4	13.6	66.6	1.1	6.8	7.2	6.0	9.8
Somerset	268	22	57.4	21.5	14.9	14.9	-	12.5	18.5	62.7	1.1	5.6	10.1	8.1	13.0
Worcester	560	29	76.4	18.0	12.5	12.5	-	10.1	18.4	67.1	2.0	4.8	8.0	6.5	11.7

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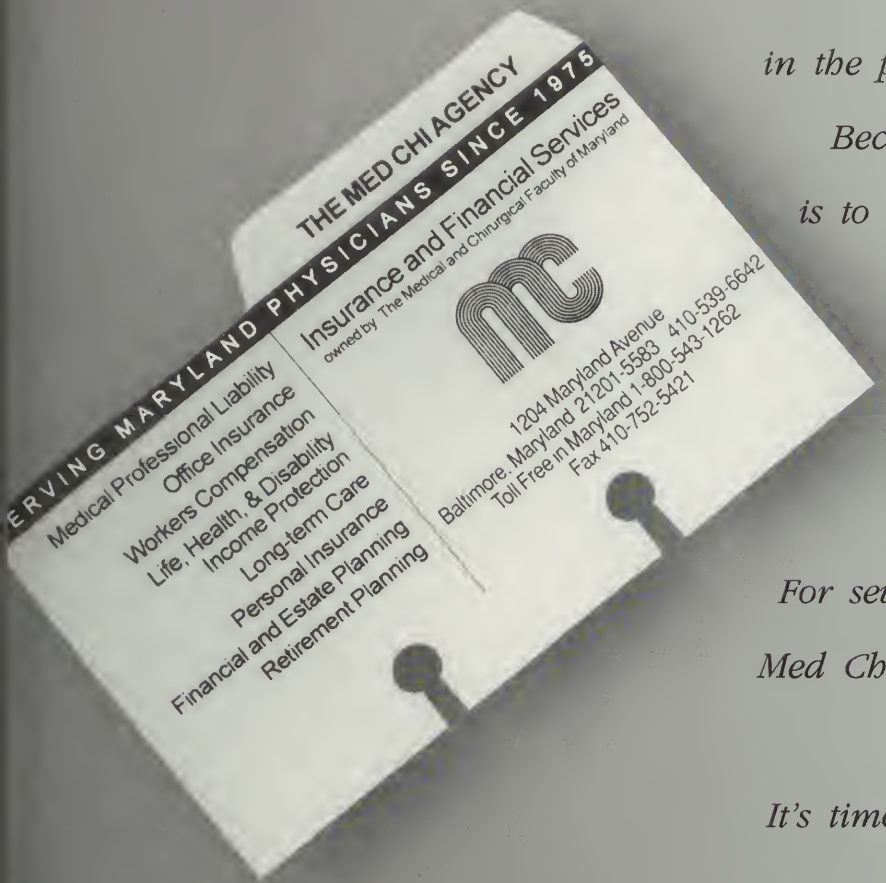
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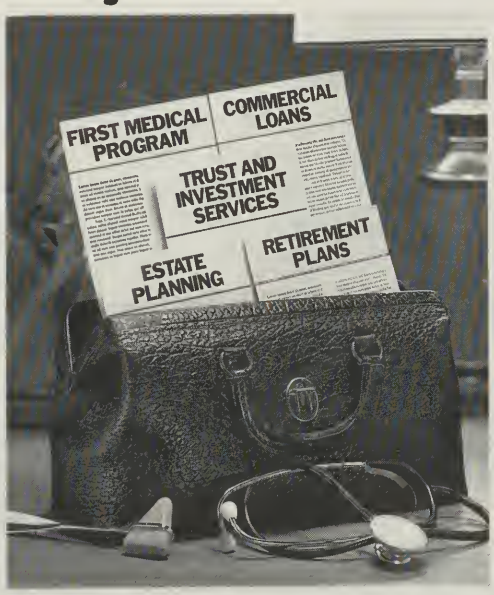
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Chief Executive Officer's Newsletter

July 1993

Upcoming Meetings - Mark your calendars!

- 1993 Med Chi Semiannual Meeting — September 10 - 12, 1993, Sheraton Ocean City Resort and Conference Center. (Preliminary program follows this issue of the Chief Executive Officer's Newsletter.)
- President's Eastern Regional Conference — October 19, 1993, Cambridge Yacht Club, Cambridge
- President's Western Regional Conference — November 11, 1993, Sheraton, Hagerstown
- 1994 annual meeting — May 12 - 14, 1994, Ramada Convention Center, Hagerstown

Fourth Annual Conference on Addiction

The Committee on Scientific Activity and the Physician Rehabilitation Committee of Med Chi are proud to announce the upcoming fourth annual conference on addiction to be held Saturday, December 11, 1993, 7:30 am - 6:00 pm, at the Sheraton BWI Conference Center.

Speakers for this year's conference will include Max Schneider, M.D., a nationally renowned physician educator in the field of addiction medicine, and Joseph Gagliardi, M.D., an educator for the Med Chi Substance Abuse Program. Topics being planned include: The Biomedical Aspects of Treatment and Recovery, Treating the Opiate-Addicted Patient, The Nature and Status of Substance Abuse Treatment, The Future of Drug Control Policy in America, The Need for Greater Access to Treatment and Helping the Helpers.

Medicare's medical policy on consultations

Please see the revised medical policy on consultations that follows this issue of the Chief Executive Officer's Newsletter. This policy affects billing of pre-operative and postoperative consultations by nonsurgeons.

Baltimore City Medical Society receives award

The Baltimore City Medical Society (BCMS) received the Associations Advance America Honor Roll Award for its program to provide medical care to Baltimore's homeless population. The BCMS Young Physicians Committee spearheaded the project to assist Health Care for the Homeless, Inc. (HCH) in meeting the medical needs of homeless people in Baltimore. Over 100 physicians participate in the program by providing care at the HCH clinic, seeing patients in their own offices, contributing funds for transportation costs to medical services, or collecting sample medications needed by the clinic.

The Association's Advance America Awards are given annually by the American Society of Association Executives to recognize significant contributions by associations in education, product and safety standards,

professional standards and codes of ethics, research and statistics, international activities, and community service.

Baltimore City Health Department celebrates 200th anniversary

September 1-2, 1993, the Baltimore City Health Department will hold a 200th Anniversary Celebration Conference at the Baltimore Convention Center. Med Chi will be exhibiting at the conference. The August issue of the *MMJ* will focus on the health department's bicentennial.

National invitational conference on managed eye care

Managed Eye Care: Paradigms & Pathways, a national invitational conference for physicians and practice administrators which details the history and success of Managed Eye Care (MEC) of Maryland, will be held in Baltimore on October 23, 1993. See CME Programs, pages 699 - 702 for details.

Angelo J. Troisi, F.A.C.H.E.
Chief Executive Officer

Medical Policy

SUBJECT: **Consultations**

EFFECTIVE DATE: **6/28/93**

CPT/HCPCS Code(s): **99241 - 99245, 99251 - 99255, 99261 - 99263, 99271 - 99275**

Description of Service: A consultation includes services rendered by a physician whose opinion or advice is requested by another physician for further evaluation and/or management of the patient. A consultant is expected to render a written opinion only. If the physician assumes responsibility for any aspect of patient management, he/she has taken over the patient's care and any subsequent services will cease to be consultations but may be allowed as follow-up hospital or office visits.

Clinical Indications: A consultation must include the patient's history and examination as well as a written report which the consultant furnishes to the attending physician for inclusion in the patient's medical records. Included in the consultation can be the writing of orders initiating diagnostic and/or therapeutic services if requested by the attending physician. If there is only an initial consultation and usually one follow-up consultation, it will be assumed the physician has not taken over the care of this patient. A follow-up consultation is the consultant's re-evaluation of a patient, usually at the documented request or approval of the attending physician. If the physician bills for regular and frequent follow-up consultations, it will be assumed that he/she has taken over management.

Billing Instructions: Consultations will be processed according to the appropriate level of care based on the diagnosis submitted on the claim and the content of the service provided. This will include the extent of the history, physician exam and degree of

decision making required. Only 1 initial consultation per patient's hospitalization per consultant will be allowed.

A physician (primary care or specialist) who performs a pre-operative consultation for his or her new or established patient at the request of a surgeon may bill the appropriate consultation code as long as all of the criteria for the use of the consultation codes are met. The following requirements for use of the Current Procedural Terminology (CPT) codes are the most pertinent in this case:

- The surgeon must request opinion or advice regarding evaluation and/or management of a specific problem.
- The surgeon's request for a consultation and the need for consultation must be documented in the patient's medical record.
- The consultant's opinion and any services ordered or performed must be documented in the patient's medical record and must be communicated to the surgeon.
- The physician must have provided all of the services necessary to meet the CPT description of the level of code billed.

The patient's medical record should support that these criteria are met. The following documentation guidelines apply:

- In an inpatient setting, the request may be documented as part of a plan written in the requesting surgeon's progress note, an order in a hospital record, or a specific written request for the consultation. In an office or other outpatient setting, the request may be met by a specific written request for the consultation from the requesting surgeon or the physician's records may show a specific reference to the request.
- The medical record should identify the specific problem which was the reason for the consultation, describe the extent of the history, physical, and medical decision making that supports the level of consultation code billed, and include the consultant's

findings and recommendations to the requesting surgeon.

If any of these criteria are not met, the physician may not bill the encounter as a consultation. For example, the physician should not bill for a consultation if:

- There is not a specific request from the surgeon to the consultant for the consultation (for example, the patient is handed a form by the hospital or surgeon's staff and is told to have his or her physician fill it out); or

- There is not a report from the physician to the surgeon for his or her use prior to the performance of the procedure.

If subsequent to the completion of a pre-operative consultation in the office or hospital, the physician assumes responsibility for the management of a portion or all of the patient's condition(s) during the post-operative period, the office consultation, initial inpatient consultation or follow-up inpatient consultation codes should not be used. In the hospital setting, the physician who has performed a pre-operative consultation and assumes responsibility for the management of a portion or all of the patient's condition(s) during the post-operative period should use the appropriate subsequent hospital care codes (not follow-up consultation codes). In the office setting, the appropriate established patient code should be used during the post-operative period.

A physician (primary care or specialist) who performs a post-operative evaluation of a new or established patient at the request of the surgeon may bill the appropriate consultation code for evaluation and management services provided during the post-operative period following surgery as long as all of the criteria for the use of the consultation codes are met and that same physician had not already performed a consultation pre-operatively (see above).

However, if the surgeon does not request the physician's opinion or advice and simply refers the patient for the management of an aspect of the patient's condition during the post-operative period, the physician may not bill a consultation. The physician's services would constitute

concurrent care and should be billed using the appropriate level visit codes.

The requirements for use of the CPT consultation codes discussed with the respect to pre-operative consultations also apply in determining if the physician should bill an encounter during the post-operative period as a consultation or a visit.

For example, if the surgeon requests the opinion or advice of a physician regarding a specific problem that has arisen following the surgery and also requests that the physician assume responsibility for the management of that problem during the post-operative period, the physician may bill the initial encounter with the appropriate consultation code and subsequent encounters with the appropriate subsequent hospital care codes. This example applies whether the patient is new or established to the physician.

A consult initiated by a patient and/or family and not requested by a physician is not reported using the initial consult codes but may be reported using the codes for confirmatory consultation or office visits.

The UPIN of the physician requesting the consultation must be documented on the claim. For services 1/1/92 and after, the claim will be denied if the UPIN is not inserted.

Approved by: Barry S. Gold MD.

Barry S. Gold, M.D., F.A.C.P
Medical Director

consult.evl

PRELIMINARY PROGRAM

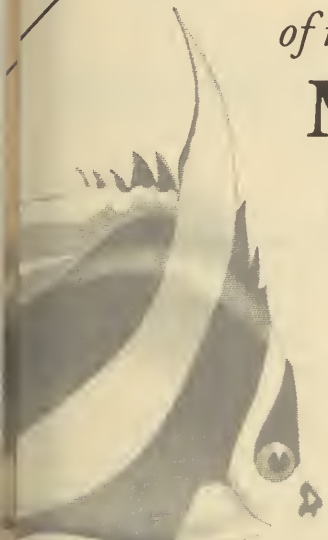
1993 Semiannual Meeting

of the

Medical and Chirurgical Faculty of Maryland

at the

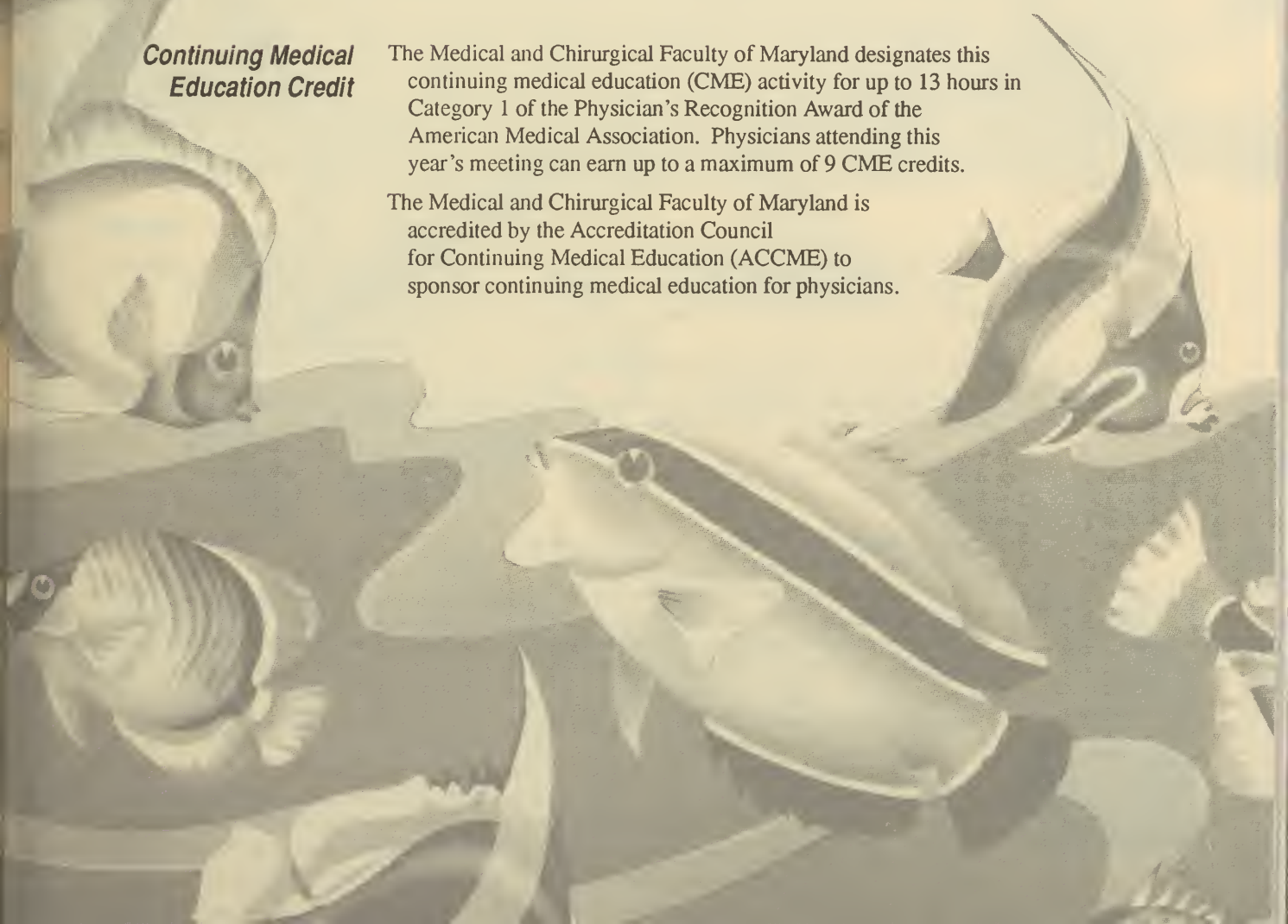
Sheraton Ocean City Resort and Conference Center
Ocean City, Maryland
Friday - Sunday, September 10 - 12, 1993



Continuing Medical Education Credit

The Medical and Chirurgical Faculty of Maryland designates this continuing medical education (CME) activity for up to 13 hours in Category 1 of the Physician's Recognition Award of the American Medical Association. Physicians attending this year's meeting can earn up to a maximum of 9 CME credits.

The Medical and Chirurgical Faculty of Maryland is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor continuing medical education for physicians.



Friday, September 10

12:00 noon - 5:00 pm **Registration/Exhibits**

1:30 pm - 3:00 pm **Council Meeting**
Welcome—Allan D. Jensen, M.D., Council Chairperson
Opening Remarks—Robert E. McAfee, M.D., President-elect, American Medical Association

3:00 pm - 4:00 pm **Break — Visit the Exhibits**

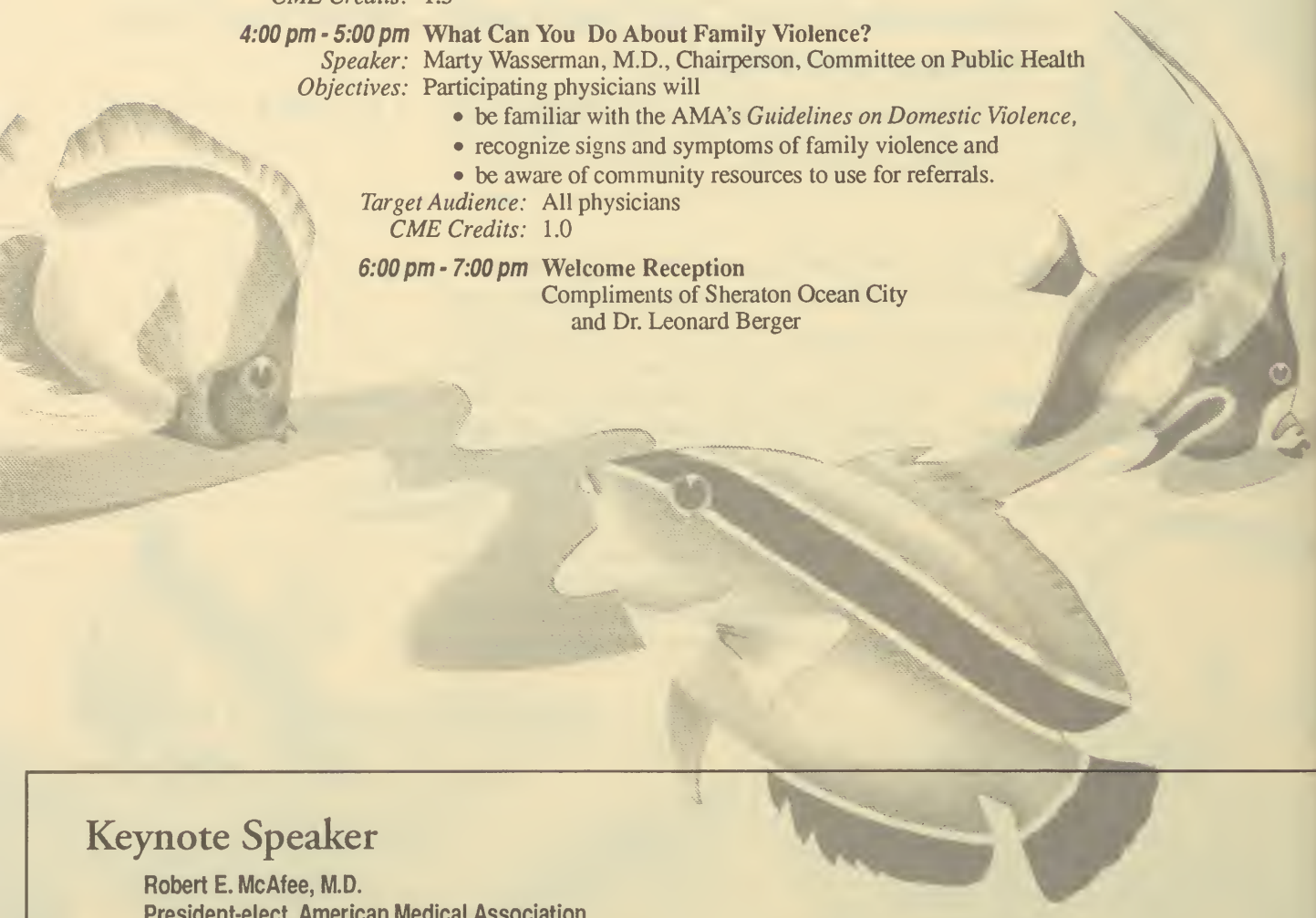
4:00 pm - 5:30 pm **Anxiety Disorders: Identification and Treatment**
Speaker: Kevin S. Ferentz, M.D., Associate Professor of Family Medicine, University of Maryland; Residency Director
Objectives: Participating physicians will be more knowledgeable about
- the epidemiology of anxiety disorders,
- specific anxiety disorders as listed in the *DSM-III-R* and
- pharmaceutical and nonpharmaceutical management of anxiety disorders.

Target Audience: Primary care physicians
CME Credits: 1.5

4:00 pm - 5:00 pm **What Can You Do About Family Violence?**
Speaker: Marty Wasserman, M.D., Chairperson, Committee on Public Health
Objectives: Participating physicians will
- be familiar with the AMA's *Guidelines on Domestic Violence,*
- recognize signs and symptoms of family violence and
- be aware of community resources to use for referrals.

Target Audience: All physicians
CME Credits: 1.0

6:00 pm - 7:00 pm **Welcome Reception**
Compliments of Sheraton Ocean City and Dr. Leonard Berger



Keynote Speaker

Robert E. McAfee, M.D.
President-elect, American Medical Association



Dr. McAfee, a surgeon practicing in South Portland, Maine, served as vice-chairperson of the American Medical Association (AMA) Board of Trustees from June 1990 to 1992. He served as a member of the Executive Committee of the board from 1988 to 1992. He was appointed to serve as an AMA commissioner to the Joint Commission on Accreditation of Healthcare Organizations in January 1986 and continues in that capacity. He also served as president of the AMA Education and Research Foundation from 1986 to 1988, and as its secretary-treasurer from 1985 to 1986.

Born in Portland, Maine, Dr. McAfee received his M.D. degree from Tufts University School of Medicine in 1960. He completed his residency in general surgery at Maine Medical Center in 1965. where he served his internship. He is a diplomate of the American Board of General Surgery, an attending surgeon at the Maine Medical Center and chief of vascular surgery at Mercy Hospital in Portland. He is also an associate professor of surgery at the University of Vermont.

Saturday, September 11

7:15 am - 5:00 pm **Registration /Exhibits**

7:30 am - 9:30 am **Medicine on Trial: An Interactive Risk Management Program for Physicians**
Medical Mutual Liability Insurance Society of Maryland (Med Mutual will give a 5% premium discount on 1994 individual liability renewal policies to its members who attend this program. To receive the premium discount, there is a $40 program fee.)

Speakers: Thomas G. Chiccone, M.D., Capital Emergency Associates
Beth Petree, Claims Representative, Med Mutual

Objectives: Participating physicians will
- be able to identify pertinent patient care issues,
- increase their knowledge of diagnostic and therapeutic modalities,
- understand a medical malpractice claim and become more aware of risk management skills.

Target Audience: All physicians
CME Credits: 2.0

8:00 am - 9:30 am **Step-by-Step: Documenting Your CME Program**

Speakers: William L. Thomas, M.D., Chairperson, Committee on Continuing Medical Education Review and invited panel

Objectives: Participating physicians will better understand
- what documentation is necessary to demonstrate compliance with the seven "Essentials" and
- how to document compliance with the "Standards for Commercial Support of CME."

Target Audience: All physicians involved with the planning of continuing medical education activities.
CME Credits: 1.5

9:30 am - 10:00 am **Break—Visit the Exhibits**

10:00 am - 12:00 noon **Plenary Session—Health System Reform: The Effect on Patient Care**

Speakers: Robert E. McAfee, M.D., President-elect, American Medical Association
Robert Pulliam, M.D., President, West Virginia Medical Society
The Honorable Casper R. Taylor, Jr., Chairperson, House Economic Matters Committee, Maryland House of Delegates
The Honorable Gary R. Alexander, Speaker Pro Tem, Maryland House of Delegates

Objective: Participating physicians will be informed about the most recent developments in health system reform.
CME Credits: 2.0

12:00 noon - 12:30 pm **Break—Visit the Exhibits**

12:30 pm - 1:30 pm **Luncheon —Peer Review: Current Issues in Medical Discipline**

Speakers: Ronald Cohen, M.D., Chairperson, Peer Review Management Committee
Israel H. Weiner, M.D., Chairperson, Board of Physician Quality Assurance

Objectives: Participating physicians will
- learn about recent peer review and medical discipline issues encountered by the Board of Physician Quality Assurance and the Peer Review Management Committee and
- understand the role of the Med Chi peer review committees in the state medical discipline process.

Target audience: All physicians
CME Credits: 1.0

1:30 pm - 3:30 pm **House of Delegates Meeting**
Introductory Remarks—Joseph Snyder, M.D., President, Med Chi

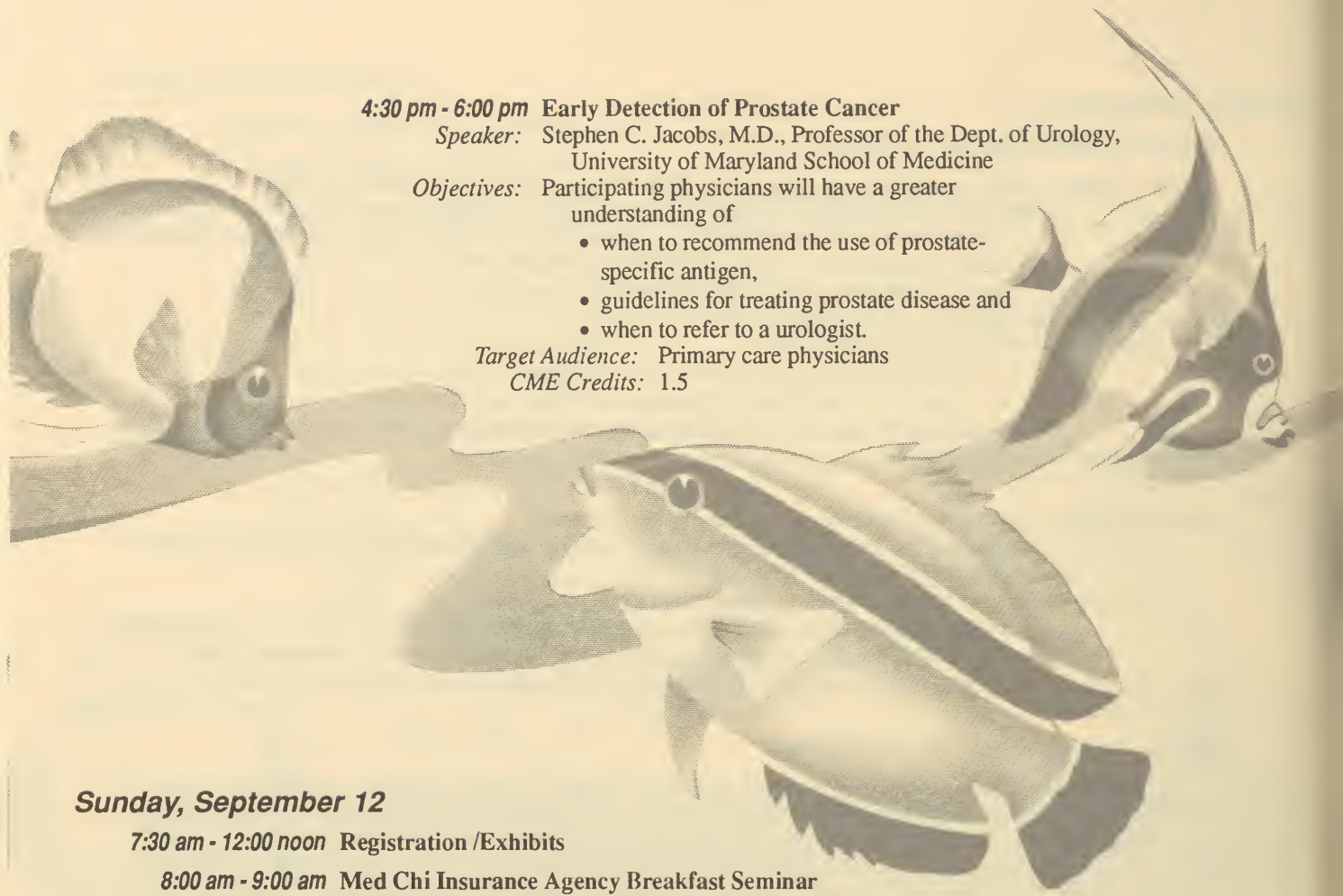
3:30 pm - 4:30 pm **Break—Visit the Exhibits**

4:30 pm - 6:00 pm **It's Just Arthritis — Take Some Aspirin**

Speaker: Ira T. Fine, M.D., Chief, Division of Rheumatology, Sinai Hospital

Objectives: Participating physicians will be aware of
- the different types of arthritis,
- appropriate diagnostic approaches and appropriate therapeutic interventions.

Target Audience: Primary care physicians
CME Credits: 1.5



4:30 pm - 6:00 pm **Early Detection of Prostate Cancer**

Speaker: Stephen C. Jacobs, M.D., Professor of the Dept. of Urology, University of Maryland School of Medicine

Objectives: Participating physicians will have a greater understanding of

- when to recommend the use of prostate-specific antigen,
- guidelines for treating prostate disease and
- when to refer to a urologist.

Target Audience: Primary care physicians

CME Credits: 1.5

Sunday, September 12

7:30 am - 12:00 noon **Registration /Exhibits**

8:00 am - 9:00 am **Med Chi Insurance Agency Breakfast Seminar**
The Age-Favored Retirement Plan: A New Concept for Qualified Retirement Planning

Speaker: Michael H. Korthaus, Pension Specialist, Safeco Life Insurance Company

Objectives: Discussion of qualified retirement plans and the advantages of a new flexible concept that has become the answer for many professional practices where the owners and executives tend to be older and more highly compensated.

Target Audience: All physicians and spouses (LIMITED TO 50—PREREGISTRATION REQUIRED)

9:00 am - 10:00 am **Medicine in Maryland: The Practice and the Profession**

Speaker: Jane Elliott Sewell, Ph.D., History of Medicine Scholar

Dr. Sewell will discuss the diversity of practices, the evolution of medical education and governing institutions, medical milestones in Maryland and the way changing social, economic and cultural settings interacted with the medical arena. A history of medicine scholar, she is researching a history of Maryland medicine for Med Chi's bicentennial.

9:00 am - 10:00 am **The Recovering Physician — Physician Rehabilitation**

Speaker: John R. Steinberg, M.D., President, Maryland Chapter of the Amer. Society of Addiction Medicine

Panel: Recovering physicians

Objectives: Participating physicians will gain an increased understanding of

- the bio-psycho-social aspects of the addictive process,
- specific aspects of the impact of addiction on the life of a physician,
- the recovery process and the traits of a stable recovery and
- how to recognize the symptoms of a relapse process.

Target Audience: All physicians

CME Credits: 1.0

10:00 am - 10:30 am **Break—Visit the Exhibits**

10:30 am - 12:00 noon **Maryland's Waterfront - The State's Treasure**

Speaker: Steve Leatherman, Ph.D., professor and director, Laboratory for Coastal Research, University of Maryland, College Park

This highly informative and entertaining session, intended for all physicians and their families, will provide details on the Ocean City ecosystem.

Support our Exhibitors

Exhibits are an integral part of the Med Chi Semiannual Meeting and are a valuable adjunct to the scientific program.

During this year's semiannual meeting, Med Chi has allocated several special time periods for physicians to meet one-on-one with exhibitors. By visiting the exhibits, you will help ensure that Med Chi continues to receive valuable income that allows us to offer you annual and semiannual meetings.

Med Chi urges you to express your appreciation to exhibitors by visiting their booths and discussing your mutual involvement in patient care.

Special Exhibit Time Periods:

Friday, September 10: 3:00 pm - 4:00 pm
Saturday, September 11:
9:30 am - 10:00 am 12:00 pm - 12:30 pm 3:30 pm - 4:30 pm
Sunday, September 12: 10:00 am - 10:30 am

Medical and Chirurgical Faculty of Maryland Officers

Beginning May 2, 1993 through May 1, 1994

President	Joseph Snyder, M.D.
President-elect	Donald H. Dembo, M.D.
First Vice-President	Alex Azar, M.D.
Second Vice-President	J. Ramsay Farah, M.D.
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Council Vice-Chairperson	J. Richard Lilly, M.D.
Chief Executive Officer	Angelo J. Troisi, F.A.C.H.E.
Committee on Scientific Activity	
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	Stanley R. Platman, M.D.
	Walker R. Robinson, M.D.
	Howard M. Silby, M.D.
Associate Member	Marianne U. Chiccone, D.M.D.

Hotel Information The Sheraton Ocean City Resort and Conference Center is located at 10100 Ocean Highway, Ocean City, Maryland.

Guest check-in time is 3:00 pm. Check-out time is 11:00 am. Requests for early check-ins and late check-outs will be honored on a space available basis only.

Reservations Med Chi has reserved a block of rooms at a special group rate. To reserve your room, call 1-800-638-2100 and tell them you'll be attending the Med Chi Semiannual Meeting. To receive the Med Chi group rate, your reservations must be made by **August 24, 1993.**

Registration Form
Medical and Chirurgical Faculty of Maryland
1993 Semiannual Meeting
Friday - Sunday, September 10 - 12, 1993
Sheraton Ocean City Resort and Conference Center

Check one: ☐ Med Chi member - no charge ☐ Nonmember - $35.00

Preregister: ☐ Luncheon—Peer Review (Saturday, 12:30 pm - 1:30 pm)

☐ Med Chi Insurance Agency Breakfast (Sunday, 8:00 am - 9:00 am)

Form of payment: ☐ Check (payable to Med Chi)

☐ MasterCard ☐ Visa

Credit Card No. _____ Exp. Date _____

Signature _____

Registrant information:

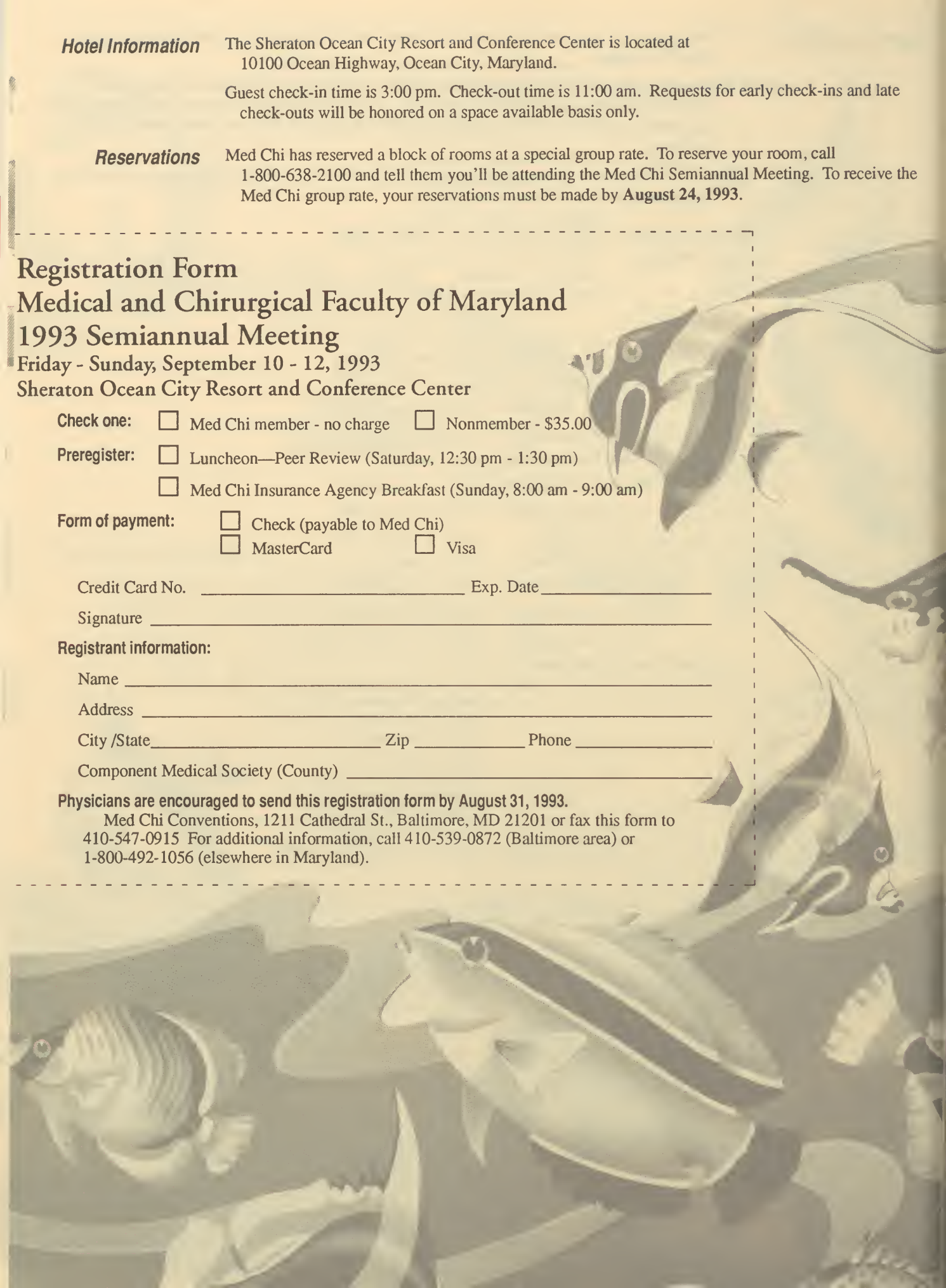
Name _____

Address _____

City /State _____ Zip _____ Phone _____

Component Medical Society (County) _____

Physicians are encouraged to send this registration form by August 31, 1993.
Med Chi Conventions, 1211 Cathedral St., Baltimore, MD 21201 or fax this form to 410-547-0915 For additional information, call 410-539-0872 (Baltimore area) or 1-800-492-1056 (elsewhere in Maryland).



Inpatient Treatment For Dissociative Disorders

Under the direction of Dr. Richard J. Loewenstein, Sheppard Pratt's treatment program is based on the view that dissociative disorders are readily diagnosed and treated. Utilizing the Armstrong-Loewenstein Dissociative Disorders Assessment Protocol as a baseline, individual treatment planning is determined and the master treatment plan can include:

- intensive therapy specifically designed for people with histories of trauma and abuse;
- psychopharmacology;
- cognitive therapy;
- adjunctive hypnotherapy;
- stress management;
- managed milieu that teaches safe coping skills for symptoms such as: switching, dissociation, amnesia, and flashbacks;
- and a full range of expressive therapies.
- The staff of the DDU also provides education and therapy for the patient's present day family with assessments available for children.

Sheppard Pratt's DDU is available to adult patients with dissociative disorders or other chronic childhood onset, post-traumatic conditions who are:

- newly diagnosed and are unstable or;
- in acute crisis or are decompensating or;
- involved in working through difficult therapy material requiring a safe, secure setting or;
- dangerous to self or others and/or self mutilatory.

For more information or to make a referral, call: Dr. Susan Wait, coordinator for the inpatient DDU at (410) 938-5070.

▪ *Sheppard Pratt*
A not-for-profit health system

Maryland's Mental Health Resource
6501 N. Charles Street
Box 6815
Baltimore, Maryland 21285-6815

LETTERS TO THE EDITOR

Maryland ranks number two in public health

In its 1992 report, *America's Public Health Report Card*,[1] the American Public Health Association described a public health crisis in America—a crisis where Americans are at risk for such preventable diseases as AIDS (acquired immunodeficiency syndrome) and tuberculosis, where Americans are victimized by violence and preventable injuries, and where we endanger our own lives by unsafe lifestyle behaviors. To make matters worse, these public health problems are spreading due to poverty, poor education, environmental neglect, and lack of access to preventive health care. Additionally, while our condition worsens, we are already behind other developed nations in such areas as infant mortality and in the rate of infants born of low birth weight.

The American Public Health Association (APHA) report ranked all states on how well they are meeting their public health needs. The ranking was based on public health determinants common to all states. Five basic determinants were selected. When present, they represent the presence of a healthy society.

1. ***Access to medical care*** includes adequacy of prenatal care, access to primary care, Medicaid spending per capita, the number of primary care physicians per capita, the percentage of uninsured people, and the ratio of Medicaid recipients to poor people.
2. ***Health environment*** includes cleanliness of the air, safety of drinking water, fluoridation of the water supply, and the number of work-related injury claims.
3. ***Healthy neighborhoods*** includes funding for education, rates of on-time high school graduation, the level of income maintenance for the poor, taxes on cigarettes, unemployment, child poverty, violent crime, and motor vehicle deaths per 100,000 miles driven.
4. ***Healthy behaviors*** includes rates of obesity, binge drinking, smoking, and non-use of seat belts.
5. ***Community health services*** includes state and local government spending on community health programs, the number of public health workers per capita in the state, and the state's per capita spending on sanitation and sewerage.

For each determinant, a ranking of states by quartile was made, placing each state and the District of Columbia in the first (best), second, third, or fourth (worst) quartile. Maryland ranked in the first quartile in medical care access, in the first quartile for health environment, in the first quartile for healthy behaviors, and in the second quartile for community health services. Assuming an equal weight to each category, Maryland ranked number two in the nation, second only to Hawaii. While this is an admirable record, we must, as the Avis Rental Care company said in the 1980s, "try harder."

Under each of the five determinants, there were three to eight subtopics for which the APHA also reported rankings per state. Although, overall, Maryland scored high, there were six subtopics of particular concern according to the APHA ranking (three of which fell un-

der the healthy neighborhoods determinant): environmental pollution, where Maryland ranked 34th among the states; the violent crime rate, where Maryland ranked 47th; education spending per capita, where Maryland ranked 23rd; graduation rate, where Maryland ranked 27th; smoking rate, where Maryland ranked 30th; and government health spending per capita, where Maryland ranked 37th.

All of us who work in the health field must rededicate ourselves to educating our fellow citizens and making a commitment to secure a broad health policy that will improve the social, economic, and environmental factors affecting the public's health.

Reference

1. *America's Public Health Report Card, A State-by-State Report on the Health of the Public.* Washington, DC: American Public Health Association. November 1992.

HAROLD D. GABEL, M.D.
Dr. Gabel is director of the Montgomery County Health Department ■

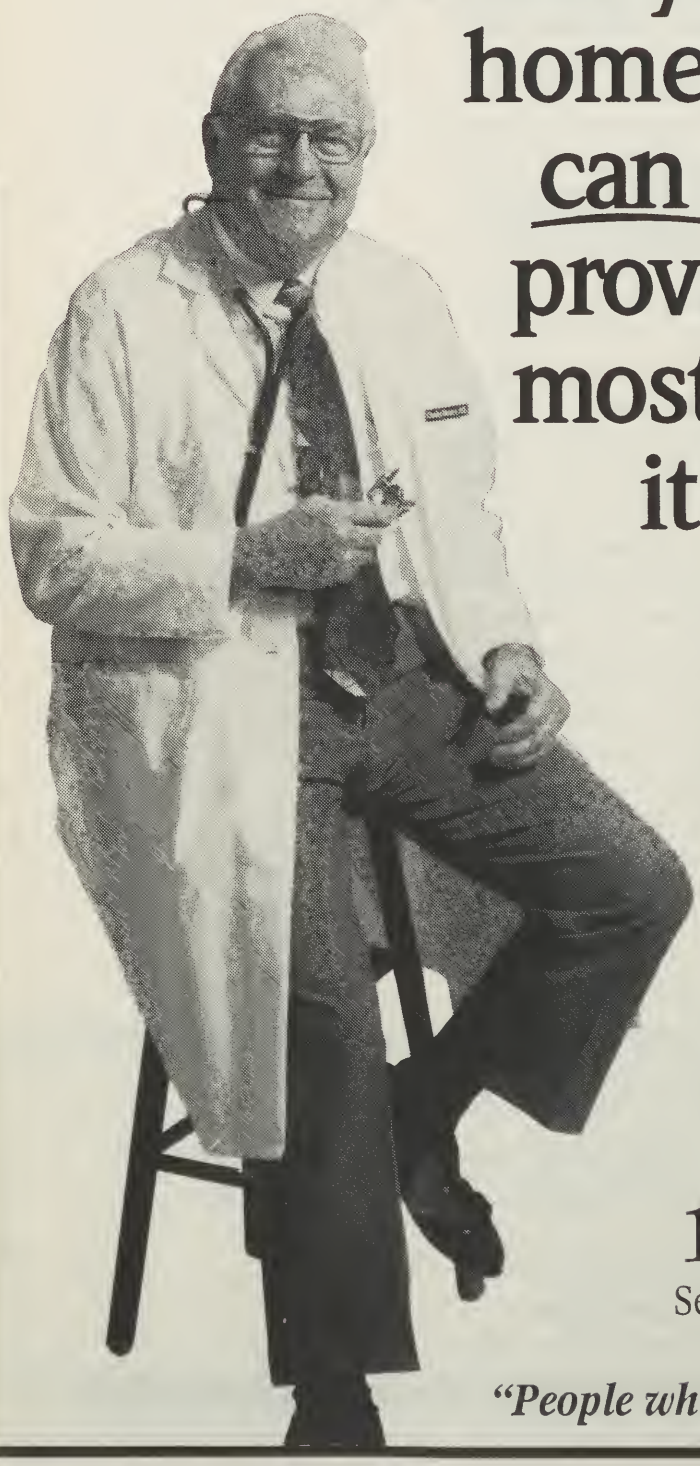
Letters To The Editor

The editorial board of the *Maryland Medical Journal* welcomes comments, criticisms, recommendations, and observations from all its readers. Please submit letters to

Editor
Maryland Medical Journal
1211 Cathedral Street
Baltimore, MD 21201-5585

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Donald "Ted" Lewers, M.D., AMA trustee

Vivian Smith

Ms. Smith is public relations director for Med Chi.

Donald "Ted" Lewers, M.D., a nephrologist and internist from Easton, Maryland, and a past president of the Medical and Chirurgical Faculty of Maryland (Med Chi), made history on June 16, 1993, when he became the first physician from Maryland's Eastern Shore to be elected to the American Medical Association (AMA) Board of Trustees. Dr. Lewers has served on the AMA Council on Legislation since 1987, and was elected council chairperson in 1992. In recent years, Dr. Lewers has represented the AMA at the White House, and before Congress and multiple regulatory agencies. In addition, he has chaired the AMA Ad Hoc Committee on CLIA (clinical laboratory improvement act), and assisted in the organization and operation of the RBRVS (resource-based relative value scale) Update Committee (RUC) where he served as vice-chairperson. Dr. Lewers has been a member of the AMA Technical Advisory Committee (TAC) and represented the AMA on the Editorial Council of the Thompson Publishing Group.

Since 1984, Dr. Lewers has been a member of the AMA House of Delegates, serving first as an alternate delegate and, since 1985, as a delegate from Med Chi. Long active in organized medicine, Dr. Lewers has held all positions of leadership at Med Chi, including president from 1985 to 1986. While president-elect (1984 to 1985), Dr. Lewers took a leave of absence from his practice to be a full-time lobbyist for Maryland physicians. That year, among other legislative victories, he helped pass the most significant tort reform package in Maryland history.

In a recent interview, Dr. Lewers responded to questions about his election, background, and activities.

◆ **Smith:** What has been your reaction to being elected to the AMA Board of Trustees?

Lewers: One of awe. I obviously feel great pride and great joy, but it is humbling to think that I was able to win on the first ballot with the incumbents. This is the highest honor I have ever experienced and the highest honor medicine could bestow upon me at this time. It is a little frightening to think of some of the issues and the amount of work, but I have had a lot of experience and I feel I am capable of doing the job.

◆ **Smith:** What is your role as a member of the AMA Board of Trustees?

Lewers: It's a great responsibility to be a trustee of the most powerful medical association in the world. As trustee, I will be representing the physicians of this country, whether they are AMA members or not. I will deal with everything from science to politics. It is a real challenge.



Figure 1. Dr. Lewers campaigns at the AMA annual meeting.

◆ **Smith:** What are your goals as a Board of Trustees member?

Lewers: One goal is to be able to balance the many aspects of every issue of medicine and, by doing so, make decisions with the best interests of the patients, the physicians, and the AMA in mind.

Another goal is to assist in the unification of the profession and in enhancing communication. If we can not communicate with each other and with the public, and present a unified force, then health care will be threatened.

◆ **Smith:** When did you first become interested in medicine?

Lewers: I knew when I was in high school that I wanted to go to medical school. Interestingly, my guidance counselor advised me to be a salesman. She told me, "Don't go to college. Get a job, and go to work and sell."

◆ **Smith:** Why did you choose nephrology?

Lewers: It was the influence of Dr. Frank Borges, a nephrologist at the University of Maryland. He peaked my interest in the field. In nephrology, you use virtually all aspects of medicine, so it is like general practice with a specialty.

◆ **Smith:** What were some highlights of your medical school experience?

Lewers: When I was a second-semester freshman, I was selected to work directly with Dr. Ted Woodward on a pilot clinical program. That was probably one of the greatest things—besides my wife—that ever happened to me.

Dr. Woodward instilled in me the love of medicine—not only the science of medicine, but the art of medicine. He taught me how to present cases, what to look at, and how to do a physical examination. More than that, he taught me the art of medicine. The art of medicine is probably easiest to define in negative terms—what science is not. It is dealing with a patient, knowing how to talk to that patient, knowing when to be stern, and when to be the father figure. The art of medicine is dealing with people. It's the finite difference between medicine and any other profession. It is something only a doctor can understand, and it is difficult to teach. But, Dr. Woodward is a master, and he imparted the art to me. I really owe everything to him; he is my father in medicine.

◆ **Smith:** What has been your greatest satisfaction during your career?

Lewers: The opportunity to be a doctor, to be part of the profession, to have people rely on me, depend on me, and have faith in me. That is what medicine is all about. The greatest part about being a physician is not the primary gain, or the financial gain, but the secondary gain of knowing that people are relying on you for the most important thing in life—their life.

There have been various phases of my career when different things have been the most important. Being elected to the AMA Board of Trustees, being president of Med Chi, and being chairperson of my own division have all been satisfying times. When I look back, I realize the most satisfying aspect of my career is that people needed me, people wanted me, people have respected me—the doctor/patient relationship.

◆ **Smith:** How did your experience as full-time lobbyist for Med Chi affect your views of medicine?

Lewers: The biggest thing that happened during that time period was that I really learned to listen. I learned there are



Figure 2. Dr. and Mrs. Lewers announce the grand door prize at the Med Chi Season-a-Sundae campaign hospitality event, held Tuesday, June 15, 1993.

several ways to look at medicine. As an individual you look at it one way, and as a doctor you look at it another way. Most physicians don't have the opportunity to debate the issue of medicine with individuals representing society who can put controls on medical practice.

As a lobbyist, I had to defend organized medicine's position in a way that always kept the patient in mind. The impact on the profession is critical; the impact on the patient is primary, and being able to debate that issue was the biggest element. I had to look at all aspects of medicine and defend certain issues. I also had to be able to compromise. The ability to look at the practice of medicine from someone else's eyes and be able to defend it was the greatest challenge of that experience.

◆ **Smith:** How has the field of medicine changed since you became a physician?

Lewers: The science has changed dramatically, but the biggest change in the practice of medicine is the interference from nonmedical forces. When I first went into practice, physicians did what they thought was best for the patient and that was it. We didn't worry about whether it would be paid for, whether insurance companies would approve it, or what the federal government was going to say.



Figure 3. Henry Wagner, Jr., M.D., AMA delegate, and Robert E. McAfee, M.D., AMA president-elect, sing along at the Season-a-Sundae campaign hospitality event.



Figure 4. Mrs. Pat Lewers and Dr. Lewers at the AMA Annual Meeting. (© 1993 Donald J. Palmisano, M.D., New Orleans)

◆ **Smith:** How has organized medicine faced this change?

Lewers: They have faced it with a great deal of frustration. A lot of people blame organized medicine, but I don't think that's right. This is a societal issue—what society seems to want.

I think organized medicine has been staunch in its defense of the practice of medicine and the physician. Most people, particularly the press, do not realize that organized medicine, while certainly protecting and working for its members, has patients' best interests at heart. I believe the cost and issues of medicine have driven health care to a point where society must say, "This is what we want."

◆ **Smith:** How will being a trustee affect your office practice?

Lewers: It will affect it greatly. I am a solo practitioner with about 80% nephrology and 20% internal medicine patients. I have six physicians with whom I work in rotation, and they have been fantastic.

I have a physician's assistant and a great office staff who have helped me with all the changes. My patients have been very understanding, and even though I have been traveling a great deal, I have been able to maintain my office hours. The demands of being a trustee will stress the office, but my coverage has been great, and the only way I have been able to achieve this is with the help of my staff and colleagues.

◆ **Smith:** What are your plans for the future?

Lewers: My plans are to do the best job I can as a trustee. I enjoy what I do in organized medicine. I hope to spend my next nine years as a trustee, but that means being re-elected to the board twice. I would like to move into board leadership if I am successful as a trustee. At this point, I have just been elected, and I need to get acclimated to being a trustee.



Figure 5. Dr. Lewers thanks the AMA House of Delegates following announcement of his election to the AMA Board of Trustees.
(© 1993 Donald J. Palmisano, M.D., New Orleans)

Dr. Lewers currently practices nephrology and internal medicine in Easton, Maryland. He is a member of the active staff of Memorial Hospital at Easton. In addition to his practice, he is medical director of the Easton Renal Treatment Center, vice-chairperson of the Board of Directors of the Medical Mutual Liability Insurance Company of Maryland, and board chairperson and chief executive officer of The Health Enhancement Center, Inc.

Dr. Lewers serves his community as a member of the Chancellor's Advisory Committee of the University of Maryland Medical Systems and as a member of the Board of Visitors of the Center for Estuarine and Environmental Studies of the University of Maryland. He is trustee emeritus of Ducks Unlimited and past president of The Waterfowl Festival, Easton, Maryland.

Born December 16, 1934, Dr. Lewers received his BS degree from the University of Maryland in 1958 and his MD degree in 1964 from the University of Maryland School of Medicine. He completed his internship in 1965 at University Hospital in Baltimore, Maryland, and served his residency at Maryland General Hospital in Baltimore, Maryland. In 1969, Dr. Lewers completed a fellowship in nephrology at Georgetown University Hospital, Washington, DC.

Dr. Lewers and his wife, Pat, reside in Easton, Maryland, and have three grown daughters and two grandchildren. ■



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What's up in the management of high-altitude pulmonary edema?

Elizabeth L. Tso, M.D., F.A.C.E.P., and T. James Wagner, Jr., M.D.

From the University of Maryland Medical System where Dr. Tso is associate professor of surgery and medicine and Dr. Wagner is a resident in emergency medicine.

ABSTRACT: *Each year, millions of people travel to high-altitude locales. High-altitude pulmonary edema (HAPE), a severe form of acute mountain sickness, is a potentially fatal complication of acute exposure to high altitude. HAPE usually occurs at elevations above 2,500 meters and typically develops in the setting of a rapid ascent to high altitude with inadequate acclimatization and continued physical exertion. Although prompt descent to lower elevation and supplemental oxygen remain the definitive treatment for HAPE, recent investigations indicate that administration of nifedipine or phentolamine may be effective prophylactic or temporizing therapies.*

Excerpted below is a personal account of high-altitude pulmonary edema (HAPE) as described by Oswald Oelz, M.D.[1]

> On September 10, 1986, I flew from Katmandu, Nepal (an altitude of 1,200 m), to an altitude of 2,800 m. I subsequently climbed in three days to a base camp at an altitude of 5,400 m on Mount Makualu (8,485 m). On September 16, two well-acclimatized friends and I ascended to 6,000 m. On the following day, we climbed via Kukuczka Ridge to an altitude of 6,900 m, where we established a camp. The climb was steep and demanding.
>
> ... having gone too high too fast, during the night I developed a rapidly worsening cough and shortness of breath. Even without a stethoscope, I could hear a bubbling in my lungs. Toward morning, I expectorated increasing volumes of frothy and later bloody sputum. I was barely able to get out of the tent owing to shortness of breath.
>
> Being all too familiar with the symptoms of HAPE and having no other options for treatment besides descent, I took 20 mg of nifedipine sublingually. Within 10 to 15 minutes, I noticed amelioration of my dyspnea and a reduction in sputum volume. I was able to ascend another 100 m on the ridge and could then traverse to easier ground. There I took 20 mg of a slow-release preparation of nifedipine and descended via the easy normal route to our base camp. During the following night, while lying in the tent, I had another episode of HAPE, which I confirmed this time with a stethoscope. My symptoms—which included rales—

promptly responded to another dose of 20 mg of nifedipine sublingually followed by 20 mg of the slow-release preparation. The following morning, I descended to 4,000 m and had no further respiratory problems.

Because air travel has increased our mobility, travelers can be transported from sea level to high altitude (elevations of 2,500 m and higher) in a few hours. Thus, a growing segment of the population can potentially develop HAPE. Annually, over 40 million people visit high-altitude locales for business or recreation[2] and may experience pulmonary symptoms caused by the acute drop in ambient oxygen tension. Historically, these symptoms were misdiagnosed as pneumonia or congestive heart failure. It was not until 1960 that pulmonary edema associated with high altitude was recognized.[3] Clinical features of HAPE are summarized in **Table 1**.[4]

Table 1. Classification of high-altitude pulmonary edema

Severity	Clinical features	Radiographic features
Mild	Dyspnea and tachycardia with exertion; resting heart rate <110	Infiltrate involving less than one-fourth of one lung field
Moderate	Dyspnea, weakness, fatigue with ordinary effort; headache, dry cough; resting tachycardia, 110–120	Infiltrate involving at least half of one lung field
Serious	Dyspnea, headache, weakness, nausea at rest; productive cough; tachycardia, 120–140	Bilateral infiltrates involving at least half of each lung field
Severe	Stupor or coma; inability to stand or walk; severe cyanosis; bubbling rales with copious sputum, usually bloody; tachycardia >140	Bilateral infiltrates involving more than half of each lung field

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The likelihood of developing HAPE is directly related to ascent rate, final altitude, length of stay at altitude, degree of acclimatization, male sex, and individual susceptibility.[5–8] HAPE incidence ranges from less than 0.01%-0.1% in skiers in Colorado (elevation 2,743 m to 3,354 m)[8,9] to 15.5% in soldiers in the mountains of India (elevation 4,500 m).[10] Individuals who have previously developed HAPE appear especially susceptible. Recurrence rates as high as 60%[11] and 66%[10] have been reported. High-altitude natives who re-ascend after spending time at sea level are also at risk.[7,12]

Pathophysiology

Continuing investigations have improved our understanding of HAPE causes. Multiple pathologic mechanisms have been implicated. The primary insult is hypoxia. At elevations of 1,524 m (5,000 ft) an individual's arterial partial pressure of oxygen (PaO_2) ranges from 75 to 81 mm Hg; at 2,286 m (7,500 ft), from 69 to 74 mm Hg; and at 4,572 m (15,000 ft), from 48 to 53 mm Hg.[7] Diminished oxygen tension is associated with pulmonary arteriolar vasoconstriction and increased pulmonary artery pressure.[4,13] Subsequent regional perfusion imbalances (i.e., hyperperfusion of areas without arterioles and increase flux of fluid into alveoli) contribute to pulmonary dysfunction.[14] Also implicated is some element of increased endothelial barrier permeability.[13,15] Analyses of bronchoalveolar lavage from HAPE victims demonstrated a high protein content and the presence of inflammatory cells, specifically alveolar macrophages, in the edema fluid.[16,17] Parallels have been drawn between HAPE and adult respiratory distress syndrome (ARDS). Both appear to be noncardiogenic, permeability-leak pulmonary edemas.[15,18]

Other factors contribute to pulmonary derangements associated with HAPE. These include a diminished hypoxic ventilatory drive,[13,15,19–21] inappropriate ADH (antidiuretic hormone) secretion, increased aldosterone, increased atrial natriuretic factor,[22] and coagulation defects.[23–26]

Prevention

HAPE prevention is best accomplished by slow, gradual ascent to allow for acclimatization. For example, when sleeping at elevations above 3,000 m, one should not gain more than 300 m in altitude per day.[27] The same medications that are effective in acute mountain sickness (AMS) prevention may lessen the risk of developing HAPE. Administration of acetazolamide[28–31] and dexamethasone[30,32–34] have been helpful in preventing AMS symptoms.

Treatment

The cornerstones of therapy for HAPE are descent to lower elevation and supplemental oxygen. With evacuation to lower altitude, symptoms usually improve rapidly; however, even with treatment, mortality may still be as high as 11%.[35] Without intervention, 40%–50% of victims may succumb.[35] Resolution of mild HAPE with bed rest alone has been reported.[36] Continu-

ous positive airway pressure masks improve oxygenation and ventilation-perfusion mismatches in some HAPE patients.[37,38] Furosemide and other diuretics have been used in the treatment of HAPE.[10] Therapy with furosemide, however, may be risky in a high-altitude wilderness setting where the patient may be dehydrated. The Gamow bag (a portable hyperbaric chamber), postural drainage, and warming are other treatment modalities that have been reported.[39,40] All these therapies are advocated only as temporizing measures to be used while waiting for evacuation or to allow the patient to improve enough to descend.

Calcium channel antagonists

In the past few years, several researchers have looked at the effectiveness of calcium channel antagonists in HAPE prevention and treatment. The vasodilating effects of calcium channel antagonists have been useful in improving the hemodynamics of primary pulmonary hypertension and chronic hypoxic conditions such as chronic obstructive lung disease.[41,42] It seems reasonable that calcium channel antagonists should also attenuate the pressor response to acute hypoxia and, to the extent that pulmonary hypertension contributes to HAPE, improve its symptoms. When administered to laboratory animals subjected to acute hypoxia, nifedipine and verapamil prevented increases in pulmonary artery pressures and total pulmonary resistance.[41,43,44] Stanbrook[41] further demonstrated that nifedipine also reverses hypoxic pulmonary hypertension. In addition to improving pulmonary hemodynamics, Reeves and Schoene[18] note that calcium antagonists diminish the inflammatory response by interrupting activation of calcium-dependent phospholipase A2.

Because HAPE is potentially lethal, and since descent is the safest and most effective treatment, it is difficult to conduct controlled clinical studies with large numbers of patients with severe symptoms.[45,46] In 1989, Oelz et al[45] reported the effects of nifedipine on HAPE patients in the Alps. The six subjects were mountaineers who fulfilled these entry criteria: ascent from 490 m to 4,559 m within 24 hours; symptoms of acute mountain sickness; alveolar-arterial oxygen gradient greater than 10 torrs; and radiographic evidence of pulmonary edema. Subjects were given nifedipine 10 mg sublingually. This dose was repeated after 15 minutes if systolic blood pressure did not drop by 10 mmHg. Additionally, study participants received nifedipine 20 mg orally every six hours. Control patients ascended at the same rate but did not meet the other entry criteria.

During the study, subjects continued active climbing without supplemental oxygen. Blood gas samples, Doppler echocardiograms, and chest radiographs demonstrated that, compared with controls, HAPE patients had significantly higher pulmonary artery pressures; lower arterial PO_2 and oxygen saturation; and increased alveolar-arterial oxygen gradients.[45,47] All subjects who received nifedipine reported improvement in clinical symptoms within 15–30 minutes, and relief of shortness of breath or chest pressure by one hour. After nifedipine therapy, pulmonary artery pressures dropped and remained in a range similar to that of controls, oxygenation improved, and the alveolar-arterial oxygen gradient decreased. Chest radiographs demonstrated progressive clearing of alveolar or interstitial edema in all six HAPE patients.

The authors theorized that reduced pulmonary shunting accounted for the rapid relief of symptoms, and that lowering of pulmonary artery pressure decreased fluid movement from the vascular space and subsequent edema formation. Headache was the only adverse side effect attributed to nifedipine. Some of nifedipine's other known side effects include hypotension, flushing, dizziness, nausea, vomiting, muscle cramps, peripheral edema, and palpitations.[18,48]

Bartsch et al[49] reported a double-blinded, placebo-controlled prospective trial using nifedipine for HAPE prophylaxis. Twenty-one mountaineers with previous HAPE episodes documented by x-ray received nifedipine or placebo beginning three days prior to ascent. Study subjects received 20 mg of slow-release nifedipine on the third and second days prior to ascent. The drug was administered twice the day before ascent, and then three times daily beginning the day of the climb. The climb was from 1,130 m to 4,559 m over a 22- hour period. At high altitude, subjects continued mountaineering activities. Radiographs, echocardiograms, arterial blood gases, and clinical exams were performed for four days after ascent. Eight normal men without HAPE histories who were considered nonsusceptible to HAPE, and who were at the camp for a different study, also underwent exams.

Differences between control and nifedipine groups were significant. Seven of 11 subjects who received placebo developed HAPE. Six of these people terminated their participation in the study by the third day at 4,559 m because of symptoms. Only 1 of 10 subjects who received nifedipine developed HAPE ($p=.01$). This one mountaineer in the nifedipine group felt well enough to continue full activities at altitude. The group receiving nifedipine also demonstrated fewer altitude illness symptoms, higher oxygen saturation, decreased alveolar-arterial oxygen difference, and significantly lower pulmonary artery pressures than the placebo group. Pulmonary artery pressures in treated subjects were close to those of subjects considered nonsusceptible to HAPE. The authors concluded that nifedipine successfully prevented HAPE in subjects susceptible to high-altitude pulmonary edema. The authors warn, however, that long-term and widespread nifedipine use for mountaineering is unstudied and potentially dangerous. The improved pulmonary parameters in the nifedipine group were presented as evidence that nifedipine acts by attenuating the pulmonary vascular response to hypoxia and preserving gas exchange.

Alpha and beta-adrenergic antagonists

In a recent abstract, Hackett and associates[50] reported on the role played by sympathetic blockade in pulmonary hypertension associated with HAPE. They documented changes in pulmonary artery pressure (PA pressure) in response to intravenous administration of an alpha-adrenergic antagonist (phentolamine) and a beta-adrenergic antagonist (esmolol). PA pressure measurements were made on the six subjects receiving drugs with and without oxygen; and receiving oxygen alone. The data showed that esmolol, with and without oxygen, increased PA pressure from baseline, while phentolamine, with and without oxygen, decreased PA pressure from baseline ($p<.05$). These results suggest that elevated alpha sympathetic activity may contribute to HAPE development.

Conclusion

Recent studies provide evidence to support the key role of pulmonary hypertension in HAPE etiology. Nifedipine prevents and reverses this response to hypoxia. Thus, nifedipine is a reasonable prophylactic agent for patients with demonstrated HAPE susceptibility. Additionally, nifedipine administration to a HAPE victim is a valuable temporizing measure when descent is impossible or must be delayed. Early data suggest that phentolamine reduces PA pressure in HAPE patients. Whether this alpha-blocker will be useful in HAPE management will be determined by future investigations.

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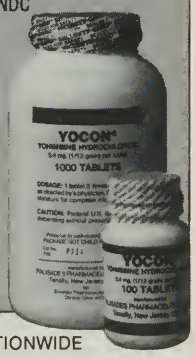
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.[1,3,4] 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to ½ tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.[3]

How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

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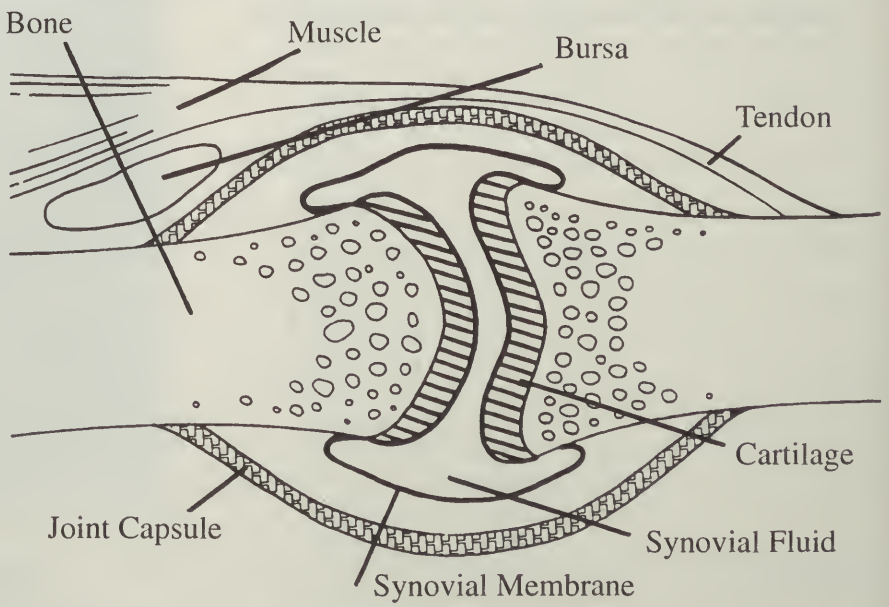
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Cough and cold medicine use in young children: A survey of Maryland pediatricians

Anne M. Gadomski, M.D., M.P.H., and Judith D. Rubin, M.D., M.P.H.

From the University of Maryland School of Medicine where Dr. Gadomski is assistant professor of pediatrics, and Dr. Rubin is associate professor of pediatrics, and of epidemiology and preventive medicine.

ABSTRACT: *Among 307 Maryland pediatricians responding to a mail survey, recommendation or prescription of cough and cold medicines for children under 36 months of age was found to be related to the patient's age, as well as to the physician's year of graduation and type of practice.*

Because children under 5 years of age experience four to nine episodes of upper respiratory infection (URI) per year,[1,2] management of these infections is a frequent issue for parents and physicians. Cough and cold medicines (CCMs) are heavily advertised, commonly found in the household, and widely available with or without prescription. Sample CCMs are frequently provided by pharmaceutical companies for distribution by physicians in clinics, emergency rooms, and private offices. Published controlled trials, however, have demonstrated little efficacy of CCMs in children less than five years old.[3-5] Moreover, there are increasing reports of toxicity in infants and children.[6-12] In view of the lack of demonstrated efficacy and the potential for toxicity, we asked how frequently CCMs are prescribed or recommended by physicians and what prompts physicians to prescribe or recommend CCMs for young children. This report describes the frequency and correlates of recommendation or prescription of CCMs for young children as determined by a survey of pediatricians in Maryland.

Methods

Pediatricians on the mailing list of the Maryland Chapter of the American Academy of Pediatrics received a one-page questionnaire as an insert in the chapter's February 1992 newsletter, stating that the University of Maryland Schools of Pharmacy and Medicine were gathering information about URI treatment in young children.

The questionnaire began with the following scenario: "A 12-month-old child is brought to your office with coryza and cough of three days duration. Your assessment is an upper respiratory infection without other associated

diagnoses such as otitis media." Respondents were asked to indicate how often they employed the management options listed in **Table 1**. Respondents were also asked how often they recommended or prescribed CCMs for different age groups, child symptoms, or parental characteristics listed on the questionnaire. Respondents could choose one of four options (usually, sometimes, seldom, or never) to indicate frequency for each questionnaire item. Finally, respondents were asked to indicate what specific cough and cold ingredients they usually recommended for children under 2 years of age. Practice type, location, and year of medical school graduation, but no other identifying information, were included on the questionnaire. A second mailing was not attempted. Results were entered in dBASE 4.0, a database software program, and analyzed using SPSS 4.1, a statistical data analysis software program.

Table 1. Management options chosen by responding pediatricians (%) for a 12-month-old with an uncomplicated common cold (N= 307)*

	Usually	Sometimes	Seldom	Never
Explain what causes colds	84	12	2	0
Vaporizer	56	33	8	1
Saline nose drops	36	45	15	3
Bulb syringe	30	40	18	8
Increase fluids	59	26	10	2
Acetaminophen	25	49	18	8
Over-the-counter CCM	13	47	28	11
Prescribed CCM	2	16	44	35

Due to incomplete responses across each management option, the sum of the response percentages does not always equal 100%.

Results

Of 979 mailed questionnaires, 329 (34%) were returned. Twenty-two (7%) respondents were retired, inactive, or in administrative or research positions, leaving 307 questionnaires for analysis. Respondents included 31% in group practices, 21% in hospital practice, 21% in academic practice, 14% in solo practice, and 11% in health maintenance organizations (HMOs); 2% did not indicate practice type. Forty-six percent of the sample had graduated from medical school before 1980. Twenty-seven percent of the practices were located in Baltimore City or Washington, DC; 58% were in suburban counties; and 7% in rural counties. Seven percent did not indicate practice location. Type of practice and year of medical school graduation were correlated ($r = 0.34$, $p < .001$): Recent graduates were more likely than earlier graduates to be in hospital or academic practices (57% vs 23%) as opposed to solo, group, or HMO practices (41% vs 73%).

Regarding management of the 12-month-old with a common cold, most pediatricians indicated that they usually explained what causes colds (**Table 1**). The next most common management strategies were to recommend increased fluid intake and/or use of a vaporizer. Over-the-counter CCMs were "sometimes" recommended by 47% of respondents and "usually" recommended by 13%. Although year of medical school graduation was not significantly correlated with CCM prescription ($r = 0.13$), it was correlated with CCM recommendation ($r = 0.20$, $p < .001$). For example, 73% of physicians who graduated prior to 1980 "usually" or "sometimes" recommended CCMs, compared with 49% of recent graduates (chi-square = 18.7, $p < .001$). Prescribing CCMs was the least commonly reported management strategy, as only 2% of respondents "usually" and 16% "sometimes" prescribed CCMs. Twenty-two percent of physicians who graduated prior to 1980 "usually" or "sometimes" prescribed CCMs, in contrast to 15% of recent graduates (chi-square = 13.1, $p < .01$).

Frequency of reported CCM recommendation increased with the age of the hypothetical patient. Fourteen percent "usually" or "sometimes" recommended CCM use for infants under 6 months of age, whereas 86% "seldom" (32%) or "never" (55%) recommended CCM use in this age group. For children 13 months to 24 months of age, 61% of respondents indicated that they "usually" or "sometimes" recommended CCMs, compared with 39% who "seldom" (26%) or "never" (13%) did. For children over 36 months, 80% "usually" or "sometimes" recommended CCMs, whereas 20% "seldom" or "never" recommended CCMs.

Reasons given by respondents who "usually" or "sometimes" recommended or prescribed CCMs for young children are presented in **Table 2**. "Difficulty sleeping" was the most common child-related reason for advising CCM use. The most common parent-related reasons reported for CCM use were that the parent was kept awake, or requested or insisted on a CCM.

For children under two years of age, 58% of respondents reported using combination CCMs. Of these, 58% preferred specific brands, naming a total of 30 brands. Type of clinical practice was associated with choice of CCM ingredients. Pediatricians in solo (63%), group (79%), or HMO (64%) practices indicated more frequent use of combination CCMs than those in hospital (50%) or academic (40%) practices (chi-square = 26.6, $p < .0001$). The most common single ingredient recommended was decongestant, indicated by 57% of respon-

Table 2. Reasons reported by Maryland pediatricians (%) for "usually" or "sometimes" recommending or prescribing CCM for young children (N= 307)

	Recommend	Prescribe
Child has nasal congestion	48%	27%
Child has cough	57	39
Child has difficulty sleeping	62	42
Parent is kept awake	53	36
Parent requests prescription	56	30
Parent insists on prescription	56	33
Parent has insurance coverage for drugs	*	19
Parent has Medicaid	*	20

* Not asked

dents, of whom 62% stated a brand preference. The next most common single ingredients were dextromethorphan (36%) and antihistamines (25%). Phenergan and codeine were advocated for children under two years of age by only a few pediatricians (3% and 5%, respectively). There was no correlation between year of medical school graduation and frequency of recommendation of either combination or single-ingredient CCMs.

Discussion

While the reportedly low rate of CCM use in infants under 6 months of age is reassuring, the high frequency of use of these medicines in 1- to 3-year-olds is surprising given the lack of demonstrated efficacy of CCMs in young children. The most frequent symptoms prompting CCM use—child's difficulty sleeping or cough—are not substantiated by clinical trials. Furthermore, CCMs cannot be considered innocuous placebos[13] due to potential adverse side effects.

In this group of physicians, recent medical school graduates were less likely than earlier graduates to report reliance on pharmaceutical strategies to manage uncomplicated URIs in young children. Reasons for this difference cannot be determined from this survey, but may be due to increased awareness of the lack of demonstrated efficacy as well as the potential toxicity of these products in children. Another possible reason is that younger physicians were more likely to be in academic or hospital settings, where in subspecially practices they may be less likely to treat children with URIs and where they also may be relatively isolated from CCM marketing by pharmaceutical representatives.

Because of the relatively low response rate and the fact that the survey was limited to physicians in a single state, the results may not be representative of all pediatricians. Furthermore, although in the United States approximately one-third of medical encounters by patients under age 4 are with physicians other than pediatricians,[14] this survey did not include family or general practitioners. Because prescribing habits may vary by specialty, our data do not identify the entire spectrum of CCM recommendation or prescription for young children. Results are also limited by self-report; however, the survey was anonymous to promote more candid responses. A better way to evaluate prescribing practices would be exit interviews or direct observation. Lastly, the effect of drug promotion efforts on physician-prescribing behavior has been well described[15-17] and may be an important determinant of CCM use that could not be evaluated by the methods used in this survey.[18]

Parental expectations, attitudes, and beliefs appear to influence pediatrician recommendation or prescription of CCMs for young children. The most difficult part of common cold management may be dealing with parents who insist on CCM treatment of symptoms. Socioeconomic factors, educational level, perception of a child's susceptibility to illness, and beliefs regarding efficacy of over-the-counter medications are important parental determinants of drug use in children.[19] Parents are regularly exposed to CCM promotion through advertising, and their insistence or request for CCMs may be an indirect measure of the effect of direct-to-consumer advertising by drug companies.[20]

On the other hand, parental pressure regarding CCMs may be secondary to fatigue, as suggested by this survey, or simply by the desire to do something for the child. Signs of URI, particularly cough, frequently worry or annoy parents, even if the signs do not endanger the child. These symptoms become the focus of attention and may lead to the use of adult medicines or increasing dosages to obtain symptomatic relief without regard to the potential harmful effects of certain remedies.[21]

Existing literature on prescribing behavior describes considerable resistance among physicians to send patients home empty-handed.[22-24] Physicians' need to "do something medical" and patients' expectations are strong motivations for "nonscientific drug prescribing."[18,23] Three-quarters of nonscientific drug prescribing by general practice physicians may be explained by patient demand and invocation of the placebo effect.[23] The pediatric analogue to bending to patient demand or preference may be bending to parental pressure, although the effect of parental pressure on physician prescribing practices has not been well documented.

Changing these views and practices will be difficult if clinicians believe parents are unhappy unless medications are prescribed. For parents, carefully formulated health education messages, delivered within the context of acute visits for URI,

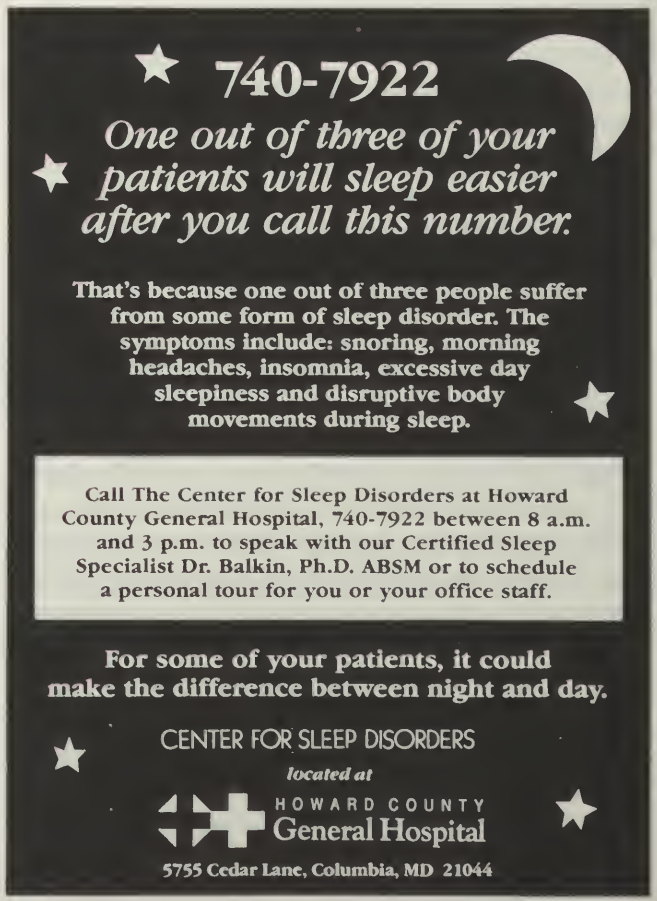
can lead to safe and satisfactory management of a child's cold at home without the risk or expense associated with CCM use. Additionally, managed care, and hospital and clinic drug formularies can be modified to remove potentially dangerous combination products. Pending further research to provide definitive data on CCM efficacy, continuing medical education to counter CCM promotion efforts or "academically based unadvertisements" [18] will be necessary to rationalize management of the common cold.

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Pathogenesis and therapy of pulmonary emphysema

Prashant Kumar Rohatgi, M.D., and Truvor Vadym Kuzmowych, M.D.

ABSTRACT: *Emphysema is characterized by permanent enlargement of the respiratory air spaces distal to the terminal bronchioles accompanied by destruction of their walls and without obvious fibrosis. We present a review of this disease, discussing its classification, pathology, and therapy.*

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The word "emphysema" is derived from the Greek words *en* 'in' and *physema* 'a blowing'. It was originally applied by Blagden to describe a case of postpartum subcutaneous emphysema.[1] Over the years, the word evolved to mean "a condition of the lung characterized by permanent enlargement of the respiratory air spaces distal to the terminal bronchioles accompanied by destruction of their walls and without obvious fibrosis."[2]

Classification of emphysema

Although emphysema is defined in terms of lung structure alterations, it is classified according to the lung acinus location that is predominantly affected by these pathologic changes. The acinus is that part of the lung distal to a terminal bronchiole. The terminal bronchiole is the last generation of noncartilaginous, purely conductive airways. Each acinus consists of respiratory bronchioles, alveolar ducts, alveolar sacs, and alveoli.

Localization of emphysema in the acinus is easiest when the disease is relatively mild. It is best appreciated by inspecting the cut surface of an inflation-fixed lung with a magnifying glass or by examining paper-mounted thin slices of inflation-fixed lungs as described by Gough.[3]

Centriacinar emphysema. Centriacinar (centrilobular) emphysema is characterized by respiratory bronchiole destruction and development of dilated air spaces in central portions of the pulmonary acinus. This form is dominant in cigarette smokers and invariably associated with the collection of inflammatory cells in respiratory bronchioles, particularly pigmented

alveolar macrophages. Centriacinar emphysema lesions are more common and severe in upper regions of affected lungs. Dilatation and destruction of respiratory bronchioles, mimicking centriacinar emphysema, has been described in simple coal workers' pneumoconiosis.

Panacinar emphysema. In panacinar (panlobular) emphysema, the entire acinus is uniformly involved in the destructive process. Panacinar emphysema tends to localize in the lung bases, predominating in lower lung zones. It is most common in the genetic form of emphysema due to the homozygous deficiency of the alpha$_1$protease inhibitor, alpha$_1$-antitrypsin (A_1AT). Panacinar emphysema-like changes have also been observed in advanced centriacinar emphysema in cigarette smokers with normal A_1AT levels.

Distal acinar emphysema. Distal acinar (paraseptal) emphysema is characterized by destruction of alveolar ducts and sacs. This results in formation of blebs, or bullae, adjacent to interlobular septa or abutting the pleura. Such bullae are generally seen in upper zones of the lungs. Rupture of these bullae is responsible for episodes of simple spontaneous pneumothoraces in young adults, especially tall, thin individuals. In contrast to centriacinar or panacinar emphysema, this form of emphysema is generally focal and does not result in airway obstruction until late in the disease course.

Normal anatomy and pathology

The lungs' connective tissue framework is made up of elastin and collagen fibers embedded in an amorphous substance consisting principally of proteoglycans. Connective tissue fibers exist as a continuum throughout the lung. Conceptually, however, the connective tissue fiber arrangement in the lung is divided into three compartments. The first is the relatively fixed, axial connective tissue compartment, which surrounds bronchi, bronchial and pulmonary arteries, and the associated deep lymphatic plexus. The second is the peripheral connective tissue compartment, which includes connective tissue in the visceral pleura and its extensions into the lung parenchyma by way of interlobar and interlobular fissures and septa. Pulmonary veins and superficial lymphatic plexus run through these septa, which ultimately divide the lung into pulmonary lobules. The third compartment is parenchymatous connective tissue that connects the axial and peripheral fiber systems, providing a framework for all structures within the acinus and primary lobule. This includes the fiber skeletons of respiratory bronchioles; pores of Kohn; interalveolar fenestrations; and alveolar ducts, sacs, and septa.

Pathologists recognized over a century ago that dilatation of air spaces in emphysema is accompanied by progressive enlargement of fenestrations within alveolar septa, ultimately leading to disruption of the septa and capillary network within. In 1876, Epinger first brought attention to the disruption of elastic fibers within the lungs of emphysema patients. Orsos, however, was first to suggest rupture of elastic fibers as the initial lesion in emphysema.[1]

Physiology

The major physiologic lung abnormalities in emphysema patients are loss of elastic recoil, decreased surface area for gas exchange, and limited airflow. Unfortunately, *in vivo* measurement of these physiologic parameters is not sensitive enough to detect mild degrees of emphysema. Increased pulmonary compliance, or loss of elastic recoil, is believed to be due to destruction of elastin fibers in lung parenchyma. Lung compliance is increased in patients with moderate to severe emphysema, but there is weak correlation between changes in lung compliance and severity of emphysema as assessed by morphologic examination of whole lungs.

Destruction of alveolar septa in emphysema results in decreased surface area for gas exchange, reducing the lungs' diffusing capacity. Of all pulmonary physiologic parameters, reduction in diffusing capacity correlates best with emphysema severity. It is important to recognize, however, that normal diffusing capacity does not exclude a diagnosis of emphysema. Airflow limitation in emphysema is due to loss of radial traction on small airways by connective tissue fibers or airway inflammation. Recent findings suggest airflow limitation in centriacinar emphysema is due primarily to airway abnormalities, with loss of radial traction playing an additive role. In panacinar emphysema, on the other hand, airflow limitation is due mainly to the loss of elastic recoil.[4] Generally, measurement of airflow obstruction and lung volume is not helpful in differentiating emphysema from other diseases that produce chronic airflow limitation.[5]

Chemistry

Desmosine and isodesmosine are two tetrafunctional, cross-linking amino acids unique to elastin. Measurement of desmosine and isodesmosine in lung parenchyma devoid of pleura, large airways, and blood vessels has been used to assess elastin content of lungs.[6] Results were expressed as a percentage of total lung parenchymal connective tissue, and showed that the proportion of elastin is reduced in emphysematous human lungs compared with normal controls. Whether elastin degradation products are elevated in blood or urine of emphysema patients remains unsettled at present, primarily because of problems with assay methods used to detect these elastin-derived peptides.

Pathogenesis

To date, pathologic, physiologic, and biochemical data suggest that the underlying process leading to emphysema development is the fraying and rupture of elastin fibers

within alveolar walls. Several concepts and theories explaining the basic mechanism for this process have evolved over the past century. They range from the "mechanical wear and tear" theory of emphysema originally proposed by Laennec, to the present concept of a biochemical "protease-antiprotease" imbalance.

In 1963-1964, Laurell and Eriksson made a seminal observation associating deficiency of an alpha-$_1$globulin peak of serum protein electrophoresis with obstructive lung disease[7] and a familial form of emphysema.[8] In the initial report, they described five patients with an absent alpha-$_1$globulin peak on serum protein electrophoresis. Three had obstructive lung disease.[7] Laurell and Eriksson also demonstrated that the absent peak on serum protein electrophoresis was associated with the deficiency of a glycoprotein with antitrypsin activity.[7] In his second paper, Eriksson[8] described a family with three siblings who had emphysema, A_1AT deficiency, and markedly diminished trypsin-inhibitory capacity. These observations strongly supported the hypothesis that genetic factors are important in emphysema pathogenesis.

The true biologic significance of A_1AT deficiency in emphysema pathogenesis became more evident when Gross[9] described emphysema development in rats after tracheal instillation of papain, a proteolytic enzyme. Based on this discovery, the "protease-antiprotease theory of emphysema" came into being. It was modified to the "elastase-antielastase theory of emphysema" after it was recognized that experimental emphysema produced by tracheal instillation of proteases occurred only if the proteases had elastolytic activity.[10,11] The elastase-antielastase theory postulates that elastin fibers in the alveolar septa are constantly exposed to endogenous elastases, but are protected from these proteolytic enzymes by antielastases in the interstitial fluid bathing the elastin fibers. Antielastase deficiency or elastase excess disrupts the balance and destroys elastin.

Endogenous elastases

Potential sources of elastases capable of interacting with alveolar septal connective tissue include distal organs, such as pancreas; circulating elements, such as platelets, neutrophils, and monocytes; intra-alveolar cells, such as macrophages; and mesenchymal cells, such as fibroblasts and smooth muscle cells in the alveolar interstitium. Pancreatic elastases are detectable in blood only with pancreatitis and do not have a role in emphysema pathogenesis. Little is known about elastases produced by mesenchymal cells in the pulmonary interstitium, and the significance of these enzymes in emphysema pathogenesis is poorly understood. The role platelet elastase has in emphysema pathogenesis is unknown. Alveolar macrophages, circulating neutrophils, and, to a lesser extent, monocytes are believed to be major sources of elastases responsible for disintegrating elastin and causing pulmonary emphysema.

Neutrophils. Neutrophils are rich in the amount and variety of proteases present in their cytoplasmic granules. Only three of the proteases have the capacity to degrade lung elastin. They are stored as intracytoplasmic azurophilic granules and are released during phagocytosis or when the neutrophils die and disintegrate.

Neutrophil elastase is a glycoprotein most active at neutral or slightly alkaline pH. It has serine at the active site and is, therefore, classified as a serine protease. Neutrophil elastase not only disintegrates elastin as its name implies, but also attacks connective tissue components such as proteoglycans, type III and type IV collagen, and fibronectin. Neutrophil elastase also destroys components of the clotting cascade, immunoglobulins, and kinins.

Important observations supporting the putative role of neutrophil elastase in emphysema pathogenesis are as follows: tracheal instillation of purified human neutrophil elastase in animals results in pulmonary emphysema;[12] neutrophil elastase can be immunocytochemically localized to elastin fibers in smokers' lungs; and elastase-elastin complexes can be demonstrated in areas of lung destruction in emphysema patients.[13]

Cathepsin G is a neutral endopeptidase with elastolytic properties. It is 10 times less potent than neutrophil elastase.

Proteinase 3 is the most recently discovered neutral protease with elastolytic properties. As with neutrophil elastase, tracheal instillation of proteinase 3 reportedly produces emphysema in hamsters.

Monocytes. Circulating monocytes are precursor cells of mononuclear phagocytes, including alveolar macrophages. They produce serine elastase that is closely related in physiochemical properties and antigenic behavior to neutrophil serine elastase. Unlike neutrophil serine elastase, which is stored in intracytoplasmic azurophilic granules, monocyte serine elastase is localized on the plasma membrane surface. It can readily damage connective tissue as the cells travel from the circulation into tissues. The amount of elastase per monocyte is approximately 3% of that found in neutrophils. Monocytes lose the ability to produce serine elastase as they transform into tissue macrophages.

Alveolar macrophages. The elastin-degrading enzyme system of human alveolar macrophages is quite complex. Metalloelastases and elastolytic cathepsins can be synthesized and secreted by activated alveolar macrophages. These cells are also capable of receptor-mediated binding, uptake, and release of neutrophil elastase and other elastolytic enzymes.[14] The elastolytic capacity of activated alveolar macrophages in cigarette smokers has been studied extensively. Bronchoalveolar lavage fluid, and homogenates, lysosomal extracts, and even culture-medium bathing cell cultures of alveolar macrophages from cigarette smokers all demonstrate elastolytic activity. Which alveolar macrophage elastase is responsible for the

majority of this elastolytic activity remains unknown.

Metalloelastase is a metalloenzyme with a zinc atom at the active site. It is synthesized and secreted by activated alveolar macrophages.[14] Unfortunately, sufficient quantities of purified metalloelastase to perform *in vivo* studies cannot be recovered from human or animal alveolar macrophages.

Cathepsins are endopeptidases that react with proteins at a neutral (cathepsins G and L) or acid (cathepsins A through E) pH. They usually occur in lysosomes and are intracellularly active. Cathepsin G, found in neutrophils, has been discussed. Human alveolar macrophages have cathepsins B, D, and L, but only B and L have elastolytic activity.

Cathepsin B is a lysosomal cysteine proteinase that degrades several connective tissue components, including elastin, collagen, and proteoglycans. Cathepsin B levels have been reported three times higher in alveolar macrophages from healthy cigarette smokers compared with nonsmokers, and approximately 10 times higher in bronchoalveolar lavage fluid (BALF) from smokers compared with BALF from nonsmokers. Tracheal instillation of cathepsin B from bovine spleen into hamsters has been reported to produce emphysema.[15]

Cathepsin L is a lysosomal cysteine proteinase that is also a potent elastase. Analyses of BALF from smokers and nonsmokers have demonstrated detectable cathepsin L antigen in the fluid, with smokers having more than twice as much as nonsmokers. The enzymatic activity of cathepsin L, however, was equivalent in lysates of alveolar macrophages from the two groups.[16]

Several indirect studies have shown that the elastin destruction by human alveolar macrophages may be a rather complex process. The process requires cooperative interaction among different elastases in alveolar macrophages. It also requires a substrate modifying factor, such as plasminogen activator, normally found on the surface of activated alveolar macrophages.[17] In addition, it requires the exclusion of elastase inhibitors, such as cystatin C and the tissue inhibitor of metalloproteases (TIMP), endogenously produced by alveolar macrophages.

Endogenous antielastases

A complex system of antielastases counteracts potential damage by endogenous elastases to lung connective tissue, especially elastin. This complex defense system, for the purpose of simplicity, can be divided into circulating or serum antielastases, antielastases made in the lung, and antielastases generated by elastase-producing cells in the lung.

Circulating or serum antielastases. The alpha globulin fraction of human plasma proteins contains several glycoproteins categorized as proteinase inhibitors. They comprise approximately 10% of total plasma proteins, and each is capable of inhibiting a spectrum of proteolytic enzymes. The most abundant of these plasma proteinase inhibitors are A_1AT and alpha$_2$-macroglobulin (A_2MG). They are also the only two proteinase inhibitors that can inhibit elastases.

A_1AT is a small glycoprotein with a molecular weight of 51,000 and serum concentration of 290±45 mg/100 ml.[18] The molecule consists of one 394-amino-acid polypeptide chain combined with three carbohydrate chains. A_1AT belongs to the serpin family of proteins and is a serine protease inhibitor. It has a single reactive site containing methionine at position 358. A_1AT reacts with serine proteases as a false substrate and blocks the reactive site of the protease by forming an almost irreversible 1:1 bond with it. The protease-antiprotease complexes must subsequently be catabolized.

Because of its small size, the A_1AT molecule can readily diffuse from circulation into the interstitial fluid in the alveolar septa and also in the alveolar epithelial lining fluid (AELF). BALF studies have demonstrated the concentration of A_1AT in AELF to be about 90% that of the serum.

A_1AT inactivates a large number of serine proteases. However, in preventing emphysema, its major target in the lung is the proteases released by activated neutrophils, particularly neutrophil elastase. Kinetic studies of the reaction between A_1AT and its potential substrates found its reaction rate to be fastest with neutrophil elastase. Apparently, A_1AT does not react with metalloelastases or cathepsins produced by alveolar macrophages.

A_2MG, like other antiproteases, has a broad spectrum of inhibition. Of all endogenous elastases in the lung, however, it inhibits only neutrophil elastase in a molar ratio of 1:1.[20] The two sources of A_2MG in the lung are circulating plasma, which contains 260 mg/100 ml, and alveolar macrophages. A_2MG is a large glycoprotein with a molecular weight of 725,000. Unlike A_1AT, it does not diffuse into alveolar interstitial fluid or AELF in significant amounts. Indeed, BALF studies found A_2MG levels in AELF to be 25 times lower than in serum. This suggests A_2MG does not egress from circulation into the lung, and that the *in vivo* level of A_2MG produced by resident alveolar macrophages is quite low. In addition, BALF from patients with homozygous A_1AT deficiency has very low levels of antielastase activity. Removal of A_1AT from BALF of normal individuals results in loss of antielastase activity. These observations suggest A_2MG is a minor defensive player against neutrophil elastase. Molecular concentration of A_2MG in AELF is 200 times smaller than that of A_1AT.

Antielastases produced by the lung. *Antileukoproteinase*, formerly called bronchial mucus inhibitor, is the best characterized antielastase produced in the lung.[20] It has a low molecular weight, acid stable protein of 107 amino acids, and a methionine residue at its active elastase inhibitory site. Unlike A_1AT, antileukoproteinase forms a reversible complex

with neutrophil elastase. Furthermore, antileukoproteinase-neutrophil elastase complex dissociates in the presence of A_1AT, and the neutrophil elastase forms an irreversible complex with A_1AT. Electron immunomicroscopic studies have demonstrated antileukoproteinase attached to elastin fibers in the extracellular matrix of the human lung. Laboratory studies also suggest antileukoproteinase is more effective than A_1AT in neutralizing neutrophil elastase already bound to insoluble elastin.

Antileukoproteinase has been localized by immunoperoxidase staining to the serous cells of mucus glands in the supra- and infra-laryngeal airways and to the secretory granules in nonciliated epithelial cells of small airways, presumably Clara cells. Antileukoproteinase is the major neutrophil elastase inhibitor in bronchial secretions, but its role at the alveolar level is minor. Along with elafin, it represents less than 5% of the total antielastase activity in AELF.

Elafin is also a low molecular weight neutrophil elastase inhibitor. Its presence has been demonstrated in expectorated sputum. Recent studies discovered that elafin is secreted by type II alveolar epithelial and Clara cell lines.[21]

Antielastases generated by elastase-producing cells. Macrophages and neutrophils possess inhibitors of their own elastases. However, only inhibitors produced by alveolar macrophages can be recovered in BALF and have, therefore, been well characterized.

Neutrophil-produced elastase inhibitors. Homogenates of degranulated neutrophils suppress elastase activity in the granular fraction of these cells.[22] The nature of those intracellular inhibitors and their role in preventing emphysema is not well understood. They are believed to be intracytoplasmic and are released only in inflammatory processes characterized by necrosis and autolysis of infiltrated neutrophils.

Macrophage-produced elastase inhibitors. Macrophages produce several proteinase inhibitors. However, only A_2MG, TIMP,[23] and cystatin C are known to inhibit enzymes with elastolytic activity.

Cystatins are a family of proteins that competitively inhibit cathepsins B and L. Cystatin C is the most abundant in human lungs. Monocytes and alveolar macrophages are major sources of lung cystatin C. It is secreted by these cells and can be obtained from AELF by bronchoalveolar lavage.[24]

Pathogenesis of emphysema in A_1AT deficiency

A_1AT is coded by a 12.2 Kb gene located on chromosome 14 at q 31-32.3. It consists of three exons controlling transcription and another four that code for the protein.[19,25] The alleles are codominant, meaning maternal and paternal genes are fully and simultaneously expressed. This gene is expressed primarily in hepatocytes, where it directs synthesis and secretion of A_1AT in plasma. The gene is expressed to a lesser extent in mononuclear phagocytes. The A_1AT glycoprotein is polymorphic. Approximately 75 alleles have been identified based on acid starch gel electrophoresis with isoelectric focusing.

Several alleles are characterized at the gene (nucleotide sequence) and protein (amino acid sequence) levels. Nucleotide and amino acid sequence analyses reveal that most A_1AT variants differ from the normal M family phenotypes, including M1(Ala^{213}), M1(Val^{213}), M2, and M3, because of single nucleotide base mutation and amino acid substitution. Fortunately, most A_1AT variants are immunologically and functionally identical with regard to the spectrum of enzymes inhibited and also have normal serum levels of A_1AT. Pi^P (25% of normal), Pi^S (65% of normal), Pi^W (70% of normal), Pi^Z, Pi^{QO}, $Pi^M{}_{(duarte)}$, and $Pi^M{}_{(malton)}$ are some alleles associated with lower than normal serum levels of A_1AT. Pi^{QO}, also called the null allele, is a variant due to unstable mRNA resulting in no synthesis of A_1AT protein and, therefore, negligible A_1AT serum levels. Pi^Z, $Pi^M{}_{(duarte)}$, and $Pi^M{}_{(malton)}$ alleles are associated with an expression about 15% to 20% of normal. Homozygous expression of the above alleles, such as PiZZ, $PiMM_{(duarte)}$, $PiMM_{(malton)}$, or heterozygous combination of the above alleles, such as $PiZM_{(duarte)}$, $PiZM_{(malton)}$, or PiZQO, is associated with markedly low levels of A_1AT in serum. Heterozygous combination of these deficiency alleles with normal expressing alleles, such as PiZM, result in intermediate deficiency of A_1AT levels in the serum.

The M family of proteinase inhibitor alleles is found in over 95% of the population and is associated with normal A_1AT serum levels. The most common abnormal allele is Pi^Z. This gene is carried by one in 50 to 100 whites. However, homozygous inheritance of Z type allele has a frequency of 1 in 7,000 in a North American population of European extraction. Homozygous PiZZ inheritance is associated with very low levels of A_1AT, generally below 50 mg/100 ml.

In the Pi^Z allele, single base mutation in exon 5 (AAG replaces GAG) results in substitution of lysine for glutamic acid at amino acid position 342. This mutation results in abnormal aggregation and accumulation of A_1AT in rough endoplasmic reticulum of hepatocytes rather than being secreted into the circulation. Not only is the Z type A_1AT molecule associated with low serum levels of A_1AT, but this molecule also takes twice as long as the normal M1-A_1AT molecule to inhibit neutrophil elastase.[26] Evidence also suggests serum from PiZZ homozygous individuals has reduced capability to inactivate chemotactic factors for neutrophils.[27] These observations suggest that the lower respiratory tract in homozygous PiZZ individuals has a markedly reduced antielastase defense against neutrophil elastase because of quantitative and qualitative deficiency of A_1AT in the lung, and may also have an increased elastase burden due to deficient inactivation of neutrophil chemotactic factor. These changes tilt the elastase-antielastase

balance in favor of the elastases, leading to disintegration of elastin and other connective tissue proteins in the interstitial framework of the lung parenchyma ultimately causing panacinar emphysema. Smoking accelerates emphysema development in homozygous PiZZ individuals by mechanisms discussed below.

Emphysema pathogenesis in cigarette smokers

There is a strong association between cigarette smoking and development of chronic bronchitis and centriacinar emphysema. Current concepts about centriacinar emphysema pathogenesis suggest cigarette smoking causes destruction of the elastin network in the alveolar septa and inhibits elastin repair by interfering with elastin synthesis in the lungs. According to the elastase-antielastase hypothesis, smoking affects alveolar elastin destruction by increasing the lung's elastase burden and decreasing the protective effect of antielastases in the lung.[28]

Cigarette smoking's effect on elastase burden. Cigarette smokers have elevated peripheral blood leucocyte counts and increased numbers of neutrophils in BALF compared with nonsmokers.[29] They also have increased alveolar macrophages in BALF. Histologic examination of smokers' lungs shows increased macrophages in and around respiratory bronchioles.

This increase in the alveolar pool of neutrophils and macrophages (elastase vector cells) is believed to be due to migration of neutrophils and monocytes, the precursors of alveolar macrophages, from circulation into the lungs, under the influence of one or more chemotactic factors. *In vitro* studies with nicotine, a major component of cigarettes, have demonstrated it as a direct chemoattractant for neutrophils. However, this occurs only at very high nicotine concentrations and probably has no significant role in neutrophil recruitment into the lung. *In vitro* studies have also shown that an aqueous solution of whole cigarette smoke can activate the alternate complement pathway by modifying the third component of complement. *In vivo*, such a reaction can cause generation of complement factor C5a, one of the most potent chemotactic factors for neutrophils and monocytes.[30] In physiologic concentrations, nicotine also enhances C5a neutrophil chemotaxis. Cigarette smoke interacts with pulmonary alveolar macrophages, inducing them to produce neutrophil chemotactic factors, such as leukotriene B4, and low molecular weight peptides unrelated to complement. These factors also enhance neutrophil degranulation. Furthermore, peptides released during proteolytic degradation of elastin, collagen, and fibronectin have potent chemotactic activity for elastase vector cells, perpetuating the vicious cycle of recruitment and destruction.

Comparative analysis of BALF from smokers and nonsmokers shows a larger alveolar pool of elastase vector cells and increased elastase activity in AELF of smokers. Inhibition studies and immunological studies on BALF from smokers have demonstrated that, in addition to increased neutrophil elastase activity, there is increased alveolar macrophage elastase activity. This is due to metalloproteases, cysteinyl proteases such as cathepsin B and L, and type IV collagenase with elastolytic activity.[15,17,31] Immunolocalization studies of cigarette smokers' lungs have also demonstrated neutrophil elastase bound to elastin fibers within alveolar septa. The above studies provide evidence that cigarette smoking not only increases the number of elastase-containing cells in the lung, but also enhances the production and release of elastases into the lung by these cells.

Cigarette smoking's effect on antielastase protection. In cigarette smokers, there is a good correlation between serum levels of antielastases measured by immunologic assays and those measured by functional assays. Determination of specific antielastases, such as A_1AT, in BALF from smokers reveals the level of A_1AT is normal when measured by immunologic assay methods but markedly reduced when measured by functional assay, such as determination of neutrophil antielastase activity. These findings suggest smokers have normal levels of A_1AT molecules in the AELF, but the molecules are functionally incompetent.

Oxidation of methionine residues of A_1AT in cigarette smokers' lungs renders that molecule functionally inactive.[32] Oxidation of methionine^{358} in the protruding active site of A_1AT to methionine sulfoxide changes that molecule's configuration. This prevents A_1AT from fitting readily into the specificity pocket of neutrophil elastase and decreases its affinity for that molecule by a factor of 2,000. When an oxidized A_1AT molecule combines with neutrophil elastase, it forms an unstable complex. There is also *in vitro* evidence that the methionine residue at the active antielastase site of antileukoproteinase (bronchial mucus inhibitor) is similarly susceptible to oxidative inactivation by cigarette smoke condensate or other oxidants.

There are at least two potential sources of oxidants in smokers' lungs: cigarette smoke itself and inflammatory cells activated by cigarette smoke.[33-35] The gaseous phase of cigarette smoke is rich in free-oxygen radicals such as superoxide, peroxide, and hydroxyl radicals, and the particulate fraction is rich in polymer phenoxy radicals. Cigarette smoke–activated inflammatory cells, such as neutrophils, monocytes, and macrophages, also generate reactive oxygen species and other derivative-free radicals, such as hypochlorous acid and iodide. If these free radicals and reactive oxygen species are not promptly removed by endogenous antioxidants, they can react with methionine and cause the oxidative inactivation of methionine-containing antielastases in the lung. Recent studies suggest some components of endogenous antioxidants, such as ceruloplasmin and methionine sulfoxide reductase, may also be adversely affected by cigarette smoke.

Cigarette smoking's effect on lung elastin synthesis and repair. After an elastolytic injury, the lung attempts to repair itself by laying down new elastin. *In vivo* studies have shown that, following elastase-induced lung injury, there is reduced incorporation of radio-labeled lysine into newly synthesized desmosine in hamsters exposed chronically to cigarette smoke. Elastin is formed by covalent desmosine and isodesmosine cross-links between two tropoelastin polypeptide chains. The cross-links are formed by the lysyl-oxidase-catalyzed oxidation of the epsilon amino group of lysine residues in tropoelastin. Water-soluble components of the gas phase of filtered cigarette smoke inhibit the binding of lysyl oxidase to tropoelastin, preventing formation of desmosine and subsequent cross-linking of tropoelastin to form elastin.[36]

In summary, cigarette smoking damages lung elastin by increasing the elastase burden and creating a functional antielastase deficiency in the lung, and perpetuates the damage by inhibiting repair and neosynthesis of mature elastin.

Emphysema therapy

Based on current concepts about emphysema pathogenesis, management of patients with emphysema can be divided into nonspecific measures and specific therapy.

Nonspecific measures. Goals of nonspecific measures for emphysema are to prevent disease progression, treat potentially reversible disease components, prevent disease exacerbation, and actively involve patients in disease management through lifestyle changes. These goals can be achieved using modalities listed in the therapeutic algorithm in **Figure 1**, irrespective of whether the emphysema is due to genetic deficiency of A_1AT or is related to cigarette smoking. The measures listed also apply to therapy for chronic bronchitis, which frequently coexists in the same patient and is included under the diagnosis of chronic obstructive pulmonary disease (COPD). Nonspecific measures in COPD therapy have been discussed in several recent reviews, including a statement by the American Thoracic Society.[37] It is important to recognize that all therapeutic modalities listed in the algorithm, except cessation of cigarette smoking, treat disease consequences and not underlying pathogenic mechanisms. Whether regular use of bronchodilators influences disease progression is not known, but their role, especially that of ipratropium bromide, is currently being evaluated in a large multicenter clinical trial.

Specific therapy. The ultimate aim of specific therapy in emphysema is to prevent disease progression. According to current understanding of emphysema pathogenesis, a rational approach to specific therapy is to decrease elastase burden and increase antielastase protection in the lung. One intervention that accomplishes both goals is smoking cessation, and it is crucial the patient stops smoking before embarking on other forms of expensive or experimental therapies.

Attempts to augment antielastase protection in lungs of emphysema patients have been confined, and properly so, to patients with a genetic form of emphysema due to A_1AT deficiency.[38]

Most strategies to increase the A_1AT levels in the lung have been conceived and evaluated by investigators at the Pulmonary Branch of the National Heart, Blood and Lung Institute (NHLBI). These strategies consist of therapies previously used with success in patients with other serum protein deficiencies. They include intravenous replacement of missing serum proteins in diseases such as hemophilia, hereditary angioneurotic edema, and hypogammaglobulinemia, and enhancement of release of endogenous proteins, such as C1 esterase inhibitor, by hepatocytes in patients with hereditary angioneurotic edema, as well as more novel approaches like A_1AT aerosol therapy and gene therapy. To provide adequate antielastase protection for the lungs in patients with A_1AT deficiency, it is estimated that the serum level of this protein should exceed 80 mg/dL (11 μM) and the AELF level exceed 9.5 mg/dl (1.3 μM) of fully functional A_1AT.

Enhanced A_1AT release from hepatocytes. Attempts were made to increase A_1AT levels in Z-homozygous individuals with severe deficiency of this enzyme by using agents that normally cause hepatocytes to release acute phase reactants, such as A_1AT. Typhoid vaccine and estrogen-progesterone combinations failed to significantly increase serum A_1AT levels. Attempts with danazol,[39]

Figure 1. Nonspecific therapeutic algorithm in chronic obstructive pulmonary disease

Preventive measures	Relieve airway obstruction			Miscellaneous	Lifestyle changes
	Mucolytics	Bronchodilators	Anti-inflammatory		
·Smoking cessation	·Hydration	·Inhaled anticholinergics	·Oral steroids	·Antibiotics	·Exercise
·Vaccination	·Iodinated glycerol	·Inhaled B agonists	·Inhaled steroids	·Diuretics	·Inspiratory muscle training
Pneumococcal	·Guaifenisin	·Oral theophylline			·Oxygen therapy
Annual influenza					
·Oral amantidine					·Adequate nutrition

a synthetic androgen without the serious side effects of anabolic steroids, and tamoxifen,[40] a nonsteroidal antiestrogen compound, caused minor increases in serum A_1AT levels, but not enough to provide adequate protection against neutrophil elastase in the lungs.

Intravenous replacement therapy with human plasma A_1AT. To achieve protective serum levels of A_1AT by direct intravenous infusion in patients with emphysema due to homozygous genetic deficiency or absence of that enzyme, a concentrated form of A_1AT is necessary. Today, the commercial preparation of lyophilized A_1AT is made by pooling human plasma from normal donors. When reconstituted, it contains approximately 20 mg of active A_1AT per ml along with small amounts of other serum proteins like $alpha_2$plasmin inhibitor, $alpha_1$antichymotrypsin, C1 esterase inhibitor, haptoglobin, antithrombin III, $alpha_1$lipoprotein, and albumin. On average, these preparations are 80% pure, and the A_1AT molecules are $64 \pm 2\%$ active.

Studies extending beyond 24 months have shown that intravenous infusions of human A_1AT are well tolerated when given in weekly doses of 60 mg/kg to patients with severe A_1AT deficiency (Z-homozygous, $M_{(malton)}$ homozygous, and null homozygous). These infusions produce peak serum levels of A_1AT exceeding 40 μM. They maintain nadir serum levels of A_1AT above 11μM and AELF levels of 2.62 ± 1.29 μM, just before the next infusion. A_1AT levels in AELF are above protective level and antineutrophil elastase activity is 2.42 ± 1.23 μM. This suggests the majority of infused A_1AT molecules traversing across the alveolar capillary membrane remain functional.[41] An equivalent amount of antineutrophil elastase protection is achieved when the A_1AT dose is increased to 250 mg/kg and infused intravenously at 28-day intervals. These monthly infusions are equally well tolerated when compared with weekly infusions, but it generally takes six to eight hours to infuse such a high-protein load.[42]

Aerosol therapy with human plasma A_1AT. Kinetic studies performed in dogs after infusion of radio-labeled A_1AT suggest that only 2% of the A_1AT is present in the lung at equilibrium. It is assumed that the remaining 98% is retained in nonpulmonary tissues and, in effect, wasted. An alternate approach that overcomes this limitation of intravenous infusion therapy is to aerosolize A_1AT directly to the lower respiratory tract where it is needed most.

Short-term studies have evaluated aerosolized administration of human plasma A_1AT to patients with homozygous Z-type A_1AT deficiency and emphysema. Twelve such patients were given 100 mg of purified human plasma A_1AT by aerosol every 12 hours for seven days.[43] BALF studies from these patients demonstrated that it is possible to deposit A_1AT in the lower respiratory tract using aerosol therapy. Serum levels of A_1AT after aerosol treatment with this glycoprotein also showed that A_1AT enters the bloodstream through the alveolar capillary membrane after aerosol inhalation.

Sheep breathing aerosolized human A_1AT were shown to have human A_1AT in the lymph draining from the lungs.[44] This observation, along with the human A_1AT aerosol therapy data, suggests that A_1AT accumulates in the alveolar interstitial space after aerosol administration. However, no human data demonstrates that the level of A_1AT in the interstitium from aerosol therapy is high enough to prevent elastin degradation. There is also concern about whether A_1AT aerosol therapy results in uniform distribution of this glycoprotein to all regions of the lung, especially in patients with obstructive lung disease.

Augmentation therapy with recombinant A_1AT. The remote possibility of transmitting viral diseases, the presence of small amounts of other proteins in human plasma A_1AT preparations, and the limited supply of commercially available A_1AT stimulated development of recombinant DNA-produced A_1AT (rA_1AT). The rA_1AT is identical to human plasma A_1AT except that it is not glycosylated and, therefore, has a low molecular weight of 45,000. It also has an additional methionine residue at the N-terminus. In addition, the rA_1AT is just as effective in inhibiting human neutrophil elastase as the commercially available human A_1AT.

Pharmacokinetic studies following intravenous infusion of rA_1AT in rhesus monkeys have demonstrated that, in contrast to native human A_1AT, rA_1AT has a much shorter half-life in circulation (69 ± 3 minutes versus 2.4 days in monkeys). Significant amounts of rA_1AT are excreted in urine because of lack of glycosylation. It diffuses quite readily across the alveolar capillary membrane and enhances antineutrophil elastase capacity in AELF.[45] There is no information as to whether the excretion of rA_1AT in urine produces nephrotoxicity.

Pharmacokinetic features of rA_1AT suggest that to achieve the desired threshold of antielastase protection in the lung, it would need to be given by intravenous bolus more than once a week. To obviate this problem, rA_1AT was administered without any adverse consequences by aerosol to Z-homozygous and null-homozygous patients with mild to moderate obstructive lung disease.[46] BALF and serum were obtained from these patients before and after aerosolizing 200 mg of rA_1AT. These studies demonstrated that the concentration of rA_1AT in AELF was 9 μM at four hours. It fell below the protective level of A_1AT in the lungs by 24 hours but remained significantly above pretreatment level. AELF antineutrophil elastase capacity in these patients was directly proportional to the rA_1AT level, and in null-homozygote patients, evidence suggested rA_1AT actually complexed with neutrophil elastase. Null-homozygote patients with undetectable levels of A_1AT prior to aerosol therapy had detectable levels in serum within 8 to 24 hours of aerosol therapy, suggesting that at least some aerosolized

rA_1AT reached the alveolar interstitium on its way to the pulmonary capillaries. These studies indicate a 200 mg or higher dose of rA_1AT aerosolized daily may provide adequate protection in patients with severe A_1AT deficiency.

Augmentation with modified recombinant A_1AT. As discussed earlier, the A_1AT molecule is ineffective against human neutrophil elastase when the methionine[358] at the enzyme active site of native A_1AT is oxidized. A genetically engineered human A_1AT with methionine[358] replaced by valine has been produced in yeast and bacteria. Like other recombinant proteins, this one lacks carbohydrate side chains. *In vitro* studies have demonstrated that although methionine[358] valine substitution does not affect the antineutrophil elastase activity, it makes genetically engineered rA_1AT 10 times more resistant to oxidative inactivation by neutrophils and, to a lesser extent, the oxidative inactivation by the gas phase of cigarette smoke.[47] Although this kind of research offers great promise, *in vivo* studies are needed to establish safety and efficacy.

Gene therapy to augment A_1AT. Viruses have been used as vectors for transfer of human A_1AT gene to cells and animals to evaluate the ability of this gene to express itself and produce normal human A_1AT. Two viruses—an appropriately modified retrovirus and an adenovirus—have been used as vectors for the human A_1AT gene. One major difference between these two viruses is that the retrovirus requires proliferation of infected cells for expression of retroviral proteins, including A_1AT, and the adenovirus does not.

A retrovirus carrying human A_1AT gene has been used to transfect fibroblasts,[48] and the infected fibroblast cell lines have been shown to secrete normal, functional human A_1AT. These fibroblasts were subsequently implanted intraperitoneally into athymic nude mice. Four weeks later, these mice had human A_1AT in their serum and BALF, suggesting the fibroblasts were the source of human A_1AT. The possibility of this retroviral vector being used to transfect and induce expression of the human A_1AT gene in mouse and human T lymphocytes is being evaluated. If successful, then the next step is to see if these transfected T lymphocytes can be infused into animals and humans to evaluate their ability to synthesize and release adequate amounts of human A_1AT into circulation and AELF.

Similarly modified adenovirus containing human A_1AT gene has been used successfully to transfect Chinese hamster ovarian and human cervical cell lines, as well as freshly removed tracheobronchial epithelial cells from cotton rats. All these transfected cells produced human A_1AT glycoprotein. Modified adenovirus containing human A_1AT gene has also been administered intratracheally to cotton rats.[49] Lungs and BALF obtained from infected rats were evaluated for production of human A_1AT. These studies show human A_1AT in the lungs and AELF of these animals for up to one week after infection.

At present, weekly intravenous replacement therapy with commercially available human plasma A_1AT (Prolastin) in 60 mg/kg doses is recommended only for patients with severe A_1AT deficiency.[50] Selection guidelines for A_1AT augmentation, or replacement, therapy have been developed because this therapy has not been subjected to long-term prospective trials but is presumed to be effective in halting progression of emphysema, the cost of this therapy for an adult exceeds $20,000 a year, and development of obstructive lung disease is quite variable in patients with congenital A_1AT deficiency. Augmentation therapy is indicated only for individuals with PiZZ; PiZ, Null; PiNull, Null; $PiM_{(malton)}$, $M_{(malton)}$; or other rare phenotypes associated with serum levels below 11 μM. These patients must be over 18 years of age, current nonsmokers, and have evidence of obstructive airways disease on pulmonary function test. They must also be compliant with the cumbersome and demanding schedule of weekly therapy.

A_1AT augmentation therapy is not indicated for cigarette-induced emphysema associated with normal A_1AT phenotypes. It is not indicated for individuals with normal A_1AT phenotypes associated with serum levels of A_1AT lower than normal but above 11 μM. Individuals with serum A_1AT levels below 11 μM but with normal lung function and individuals with deficient A_1AT phenotypes and liver disease but no evidence of obstructive lung disease should not be given A_1AT augmentation therapy.

All prospective candidates for Prolastin therapy should be screened for HIV (human immunodeficiency virus) and hepatitis B and C virus antibodies prior to initiation of therapy. Individuals who do not have antibodies against hepatitis B should be immunized with a licensed hepatitis B virus vaccine before or concomitant with initiation of therapy.

Decrease the elastase burden in the lungs. Therapeutic approaches that decrease elastase burden in the lungs are theoretically applicable to patients with genetic forms of emphysema due to A_1AT deficiency as well as acquired forms of emphysema due to cigarette smoking. One important step in reducing the elastase load in the lungs of emphysema patients is to reduce the burden of inflammatory cells in lung parenchyma. This can be achieved by reduction of exposure to respiratory irritants, including cigarette smoke, and by aggressive therapy of lower respiratory tract infections.

Another approach being explored is the development of natural and synthetic inhibitors of human neutrophil elastase. Ideally, these inhibitors should be delivered, or preferentially activated, in the lung interstitium, where they would affect only the neutrophil elastase present in the lung without causing systemic inhibition of neutrophil elastase.[51,52] Both natural (Eglin C derived from leeches) and several synthetic inhibitors of human neutrophil elastase have been developed. They have been effectively used to prevent or reduce emphysema develop-

ment following tracheal instillation of human neutrophil elastase in animals.

A new class of human neutrophil elastase inhibitors, the oleyl peptides, are fatty-acid peptides such as oleyl-alanyl-alanyl-prolyl-vali. Besides inhibiting neutrophil elastase, these compounds also bind to mature elastin and elastin fragments. They protect mature elastin from elastolytic enzymes and prevent induction of monocyte chemotaxis by elastin fragments. To date, no successful strategy produces the preferential inhibition of neutrophil elastase only in the lung interstitium. Aerosol inhalation is a possible way of preferentially delivering synthetic elastase inhibitors to the lung alveolar surface. Another approach is to incorporate synthetic inhibitors into biodegradable human albumin microspheres. These microspheres are of such size that after intravenous injection they become trapped in the pulmonary capillaries and release these inhibitors locally into the lung interstitium. Obviously, more information and better inhibitors are needed. There is, however, an encouraging prospect that a suitable synthetic elastase inhibitor will soon be available for use in humans.

Lung transplantation

Although the first human lung transplant was performed by Hardy and coworkers in 1963, only in the last decade has human lung transplantation become a viable therapeutic option. This is a result of the tremendous progress in tissue preservation techniques, surgical techniques that minimize breakdown and dehiscence of bronchial anastomoses, and diagnostic and therapeutic modalities that are extremely helpful in recognizing and managing graft rejection. Heart-lung transplantation, double lung transplantation, and unilateral lung transplantation have been performed successfully in emphysema patients. Currently, lung transplantation is preferred over heart-lung transplantation. However, there is no consensus at present as to whether double lung[53] or unilateral lung transplantation[54] is ideal for emphysema patients.

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Dipyridamole-thallium stress testing: A local community hospital experience*

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ABSTRACT: *Clinical data on the first 100 patients who underwent dipyridamole-thallium stress testing in our hospital were reviewed in order to re-evaluate safety guidelines and diagnostic utility in patients with coronary artery disease. Forty patients developed symptoms, including three major ones. One patient had significant bronchospasm, and two others developed significant hypotension with near syncope. The rest had nonspecific chest, shoulder, arm or throat pain, dyspnea, nausea, vomiting, and paresthesia. Most symptoms occurred within the first 10 minutes of dipyridamole infusion. Twenty-eight patients required treatment with intravenous (IV) aminophylline. Of the remaining 60 patients, 30 became hypotensive but remained asymptomatic.*

Fourteen of 20 patients who underwent coronary angiography had coronary disease. Thirteen were correctly identified by thallium imaging, and only one was identified by electrocardiogram (EKG). Six patients' angiographies showed no evidence of coronary disease. Five of these patients developed perfusion abnormalities during thallium scintigraphy.

These results suggest that dipyridamole is a relatively safe drug for pharmacologic stress testing even though the incidence of side effects is relatively high. The high incidence of thallium perfusion abnormalities in patients without coronary disease probably reflects bias in patient selection for coronary angiography, resulting in a relatively small sample of catheterized patients. However, this requires further investigation.

In January 1991, dipyridamole became the first pharmacologic agent approved by the Food and Drug Administration (FDA) for stress testing.

* *Presented at the American College of Physicians Associates meeting on May 21, 1992.*

Table 1. Risk factors for coronary artery disease

• Hypertension	54%
• Smoking	49%
• Diabetes mellitus	27%
• Family history of coronary artery disease	20%
• Hypercholesterolemia	8%
• Previous myocardial infarction or coronary artery disease	8%
• Peripheral vascular disease	5%
• No known risk factors	8%

With the availability of this agent, a number of patients with various medical conditions that limit their ability to exercise can now be tested; and dipyridamole testing yields the same or even more information than is obtained from regular exercise tests.[1]

Dipyridamole becomes the physiologic parallel of stress by increasing endogenous adenosine concentration.[2] Adenosine, a potent coronary vasodilator, increases blood flow to normal arteries by about two to fivefold, with a much lesser increment in diseased arteries.[3] This results in a coronary steal phenomenon whereby myocardium areas supplied by diseased arteries become relatively ischemic and less perfused. In contrast, areas supplied by normal arteries remain well perfused.[4-5] This disparity in myocardial perfusion can be demonstrated by a tracer substance such as thallium-201.[1,3-5]

Since the introduction of dipyridamole, we have performed 217 dipyridamole-thallium stress tests within a 15-month period. The first 100 patients were referred during the first 10 months. Approximately the next 100 referrals were tested within the next five-month period, suggesting increasing use and acceptance of this test in evaluation of patients with suspected coronary artery disease (CAD) in our institution. We reviewed the first 100 patients tested in order to re-examine the initial test administration guidelines and to re-evaluate the test's safety and utility in CAD diagnosis.

Patient population

Fifty-six females and 44 males underwent dipyridamole-thallium stress testing because of symptoms suspicious for CAD. Patients' ages ranged from 49 to 86 years; the mean age was 69. Patients unable to walk on the treadmill included those with peripheral vascular disease, those with degenerative arthritis, patients recovering from a cerebrovascular accident (CVA), and a few with chronic lung disease histories who were not actively wheezing at the time of study. One patient had a popliteal aneurysm, and another had an abdominal aortic aneurysm. Another indication for testing was a relatively inconclusive, low-level treadmill exercise test. Testing contraindications included significant bronchospastic disease with active wheezing, suspected unstable angina, and the immediate postmyocardial infarction period.

Most patients had one, or more frequently, multiple coronary risk factors. Hypertension was present in 54% of patients, smoking in 49%, diabetes mellitus in 27%, and a family history of CAD in 20%. Eight percent of patients had hypercholesterolemia, another 8% had a history of previous myocardial infarction, and 5% had peripheral vascular disease. Eight percent of patients had no known coronary risk factors (**Table 1**).

Methods

Patients were advised not to eat or drink xanthine-containing foods and beverages for 24–36 hours before testing. On the day of testing, each patient received 0.56 mg of dipyridamole per kg of body weight diluted with normal saline to a total volume of 60 cc, which was injected intravenously within four minutes as recommended. The electrocardiogram (EKG) was displayed continuously on an oscilloscope, and 12-lead tracings were obtained at baseline and every minute thereafter. Blood pressure was monitored every minute. Three millicuries of thallium-201 were injected at least two minutes after completion of dipyridamole injection. Tomographic imaging was performed with single photon emission computed tomography (SPECT) four minutes after thallium-201 was injected, and redistribution images were obtained after three to four hours, with re-injection of another two millicuries intravenously.

For electrocardiographic results, an exercise test was considered positive if 1 mm or more of horizontal or downsloping ST segment depression was present in at least three consecutive beats in any of the 12-leads during or after dipyridamole infusion. Thallium perfusion scans were considered positive if a fixed defect was present in any tomographic view or a reversible defect was noted during the reperfusion period. The patient's EKG, blood pressure, heart rate, and rhythm were recorded. Every symptom or sign observed during testing was documented, as well as temporal occurrence of such symptoms.

Results

Sixty of 100 patients (60%) remained completely asymptomatic during dipyridamole stress testing. Forty patients (40%) developed symptoms. Two patients (2%) became severely hypotensive and had near syncope. One patient developed junctional rhythm with a slow ventricular rate of 40–45 beats per minute before becoming severely hypotensive with no obtainable blood pressure. This patient initially had a sinus bradycardia with a rate of 50 beats per minute but was otherwise stable. A quadriplegic patient developed severe hypotension with near syncope during infusion and had a fixed, glassy stare with no blood pressure and barely palpable pulses. Both episodes were reversed successfully with aminophylline and

Table 2. Symptoms

• **Asymptomatic**	60
• **Symptomatic**	40
• Major symptoms	3
• Hypotension with near syncope	2
• Bronchospasm	1
• Minor symptoms	37
• Headache	14
• Dyspnea	11
• Nausea	6
• Vomiting	1
• Chest/arm/shoulder throat pain	22
• Paresthesia	1

intravenous (IV) fluid therapy. A patient with a history of bronchial asthma developed severe bronchospasm but responded to repeated aminophylline doses. Symptoms in these three patients were considered significant and life-threatening and, as such, are regarded as major symptoms.

The remaining 37 patients had minor symptoms that were not life-threatening. Several patients developed more than one symptom, the most common being headache, which occurred in 14 patients. Nonspecific chest, shoulder, arm, or throat pain occurred in 22 patients, dyspnea in 11 patients, nausea in 6 patients, vomiting in 1 patient, and paresthesia in 1 patient **(Table 2).**

Most symptoms occurred within the first 10 minutes after infusion (37 patients). Only three patients developed symptoms beyond this period. One patient complained of headache 15 minutes postinfusion, a second in the 17th minute, and a third patient had headache 23 minutes postinfusion. Of the 40 symptomatic patients, 28 required IV aminophylline treatment. Occasionally, sublingual nitroglycerine or IV fluids were given when initial aminophylline treatment was not effective.

The majority of patients also developed hypotension not associated with any symptoms. In an occasional patient, the total dipyridamole dose was not completed because of significant systolic blood pressure drops (>30 mm Hg), which were not accompanied by symptoms. The drops in blood pressure usually occurred in patients with initial systolic blood pressure of 100–120 mm Hg. In a few others, dipyridamole infusion had to be given longer than the recommended four minutes because of a significant systolic blood pressure drop by more than 30–40 mm Hg in spite of the absence of symptoms.

The EKG monitor did not show any significant ectopic beats during or after infusion, suggesting that dipyridamole is not an arrhythmogenic agent. Although there is a potential for arterioventricular (AV) block, this complication was not observed in our patients. One patient, however, developed junctional rhythm before developing hypotension with near syncope.

Table 3. Coronary angiography correlation with electrocardiogram

• Patients with coronary disease	14
(+) EKG changes	1
(-) EKG changes	13
• Patients without coronary disease	6
(+) EKG changes	1
(-) EKG changes	5

(+) EKG indicates 1 mm or more of horizontal or downslope ST depression in at least three consecutive beats during or after infusion.

Twenty of our 100 patients underwent coronary angiography within one month of the dipyridamole study. Left main coronary disease was defined as 50% or greater narrowing of the luminal diameter of the left main coronary artery, and significant CAD was defined as 70% or greater diameter narrowing of any of the three coronary arteries or their major branches. Fourteen of 20 patients had CAD. Of the 14 patients with coronary disease, the EKG was negative in 13 of them. Of the six patients without coronary disease, five had no EKG changes and one had a positive ischemic response **(Table 3).**

Of the 14 patients with coronary disease, 13 showed perfusion defects during thallium scanning, 11 of which were reversible defects and 2 of which were fixed defects. Only one patient with coronary disease was negative for any perfusion defect. Of the six patients without coronary disease, five were thallium-positive, including four with reversible defects and one with a fixed defect. One patient did not show any perfusion abnormalities **(Table 4).**

Table 4. Coronary angiography correlation with thallium scan*

• Patients with coronary disease	14
(+)Thallium perfusion	13
(-) Thallium perfusion	1
• Patients without coronary disease	6
(+) Thallium perfusion	5
(-) Thallium perfusion	1

(+) Thallium perfusion indicates a fixed or reversible defect.
**Note: Although 68 of 100 patients had abnormal perfusion scans, only 20 patients underwent cardiac catheterization.*

Discussion

Dipyridamole, a complex pyridine, is a potent coronary vasodilator that increases blood flow at least two to five times baseline. In the presence of coronary stenosis, blood flow is maintained by vasoregulatory mechanisms resulting in maximal vasodilatation of resistance vessels distal to the stenosis. Since the vessels supplying ischemic myocardium are already maximally dilated, dipyridamole administration will not result in further dilatation of these vessels but, instead, will dilate other resistance vessels supplying normal myocardium. The flow increase to areas supplied by normal vessels occurs at the expense of flow to areas supplied by arteries with significant stenosis, resulting in the "steal" phenomenon.

The heterogeneity in myocardial perfusion, whereby blood flow is increased in areas supplied by normal arteries and diminished in areas with significant stenosis, will result in perfusion mismatch that can be demonstrable by thallium-201. Dipyridamole indirectly causes vasodilatation by increasing adenosine concentration by cellular uptake inhibition or inactivation of adenosine deaminase, the enzyme that degrades adenosine; therefore, direct intravenous adenosine injection will result in the same hemodynamic alterations.

Based on our experience, we believe that dipyridamole is a relatively safe pharmacologic agent for stress testing, although at least 40% of our patients experienced some kind of symptoms. In addition, 30 patients developed mild hypotension but remained asymptomatic. In three patients, the symptoms were significant and life-threatening. The most significant life-threatening complication was hypotension with near syncope.

We consider symptomatic hypotension characterized by dizziness and near syncope a significant symptom since all our patients were recumbent during testing. A drop in systolic blood pressure significant enough to cause near syncope in a recumbent patient may potentially result in myocardial or cerebral ischemia or even infarction. Dizziness is a much more frequent symptom in the literature, occurring in 11.8% of patients.[6] This is probably because some patients reported in the literature were tested upright, including some who walked in place before thallium infusion.[2] Since all our patients were recumbent, we consider dizziness associated with a drop in systolic blood pressure of more than 30 mm Hg a reason to modify or discontinue dipyridamole infusion.

Since our priority during initial testing was primarily patient safety, we often modified the injection duration or terminated the injection outright if patients developed symptoms due to hemodynamic compromise. In patients whose baseline systolic blood pressure was low normal (100–110 mm Hg), a drop of only 10 to 15 mm Hg may be significant enough to cause symptoms. Although a 10% drop in systolic blood pressure is usually expected following dipyridamole infusion, the severe hypotension manifested in two patients was totally unexpected. These two patients showed no features that would identify them as high risk for developing this complication. One patient, however, was quadriplegic, and we assume that the vasodilation caused by dipyridamole was not compensated by adequate vasomotor reflexes, resulting in significant hypotension. The other patient developed an AV junctional escape rhythm due to sinus arrest and became markedly hypotensive with near syncope. This is not a totally unexpected arrhythmia resulting from dipyridamole.

Only one patient developed significant bronchospasm at the start of the series. We still consider some patients with a chronic lung disease history as candidates for dipyridamole stress testing if they are not symptomatic at the time. The availability of other pharmacologic agents such as adenosine,[7] which has a much shorter half life, and dobutamine,[8] which is not contraindicated in chronic lung disease and in sinoatrial or AV block, has allowed pharmacologic stress testing in patients who cannot tolerate dipyridamole.

In virtually all patients, symptoms initially developed during infusion or within 10 minutes after starting infusion. These observations led us to modify our monitoring practices for performing dipyridamole stress tests. Formerly, we monitored patients through the drug's duration of action, which is 20–30 minutes; we now consider it safe to discontinue monitoring after 10 minutes if no symptoms or significant hypotension have occurred. Since some patients will have no symptoms or significant hemodynamic changes, we do not consider routine administration of the antidote aminophylline in all patients undergoing dipyridamole testing. Aminophylline (an adenosine receptor antagonist), however, is given routinely to terminate any symptom or when significant hypotension is present, even if the patient is asymptomatic.

The majority of our patients (68 of 100) had positive thallium-perfusion defects. Of these, only 20 patients eventually underwent coronary angiography. Although 13 of 14 patients with CAD showed thallium-perfusion defects, and five of six patients without CAD had abnormal scans, the significance of these findings is uncertain and probably misleading since only a few selected patients were catheterized. Furthermore, most patients with no perfusion defects and no coronary disease, were excluded from referral, resulting in the catheterization mostly of patients thought to have the disease. The exclusion of most patients with negative thallium perfusion defects will ultimately result in poor specificity.[9]

On the other hand, the EKG showed a positive ischemic ST-T response in only 1 of 14 patients with CAD. Although the EKG is a poor marker for CAD during dipyridamole stress testing, the changes in heart rate which are electronically displayed are helpful in anticipating blood pressure fluctuations. An increasing heart rate response usually coincides with a falling blood pressure. As the heart rate peaks and then slowly

decreases back to baseline levels, this usually heralds the return of blood pressure to baseline.

Dipyridamole stress testing is a safe pharmacologic procedure in spite of the presence of symptoms in 40% of our patients and mild hypotension in another 30% who were asymptomatic. Symptoms are effectively relieved by intravenous aminophylline administration. Since serious complications are possible with this agent, patients should be properly screened prior to the procedure, and the test should be performed by knowledgeable personnel. This information should be taken into consideration before using dipyridamole-thallium stress testing in the evaluation and management of patients suspected of having CAD.

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Myopathy and cardiomyopathy associated with selenium deficiency: Case report, literature review, and hypothesis

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ABSTRACT: *A case of selenium-deficiency myopathy, secondary to total parenteral nutrition, is presented. The literature on selenium-deficiency myopathy and cardiomyopathy is reviewed in the context of the literature concerning selenium status in numerous diseases. An hypothesis of a wider role for selenium deficiency in the pathogenesis of myopathy and cardiomyopathy is presented.*

Selenium deficiency, resulting from residence in an area with selenium-deficient soil or from total parenteral nutrition (TPN), has been associated with myopathy and cardiomyopathy development.[1-17] In this report, a patient on TPN with a reversible myopathy associated with a low serum selenium level is described.

An extensive literature has been compiled documenting selenium status in relationship to geography, age, pregnancy, and disease states.[18,19] It can be argued that the frequent occurrence of selenium deficiency in patients with various chronic illnesses suggests that selenium deficiency may contribute to the production of myopathy and cardiomyopathy in those settings.

Case presentation

The patient was a 49-year-old white female with carcinoma of the colon and extensive intraperitoneal metastases. She was treated with extensive removal of intraperitoneal metastases and intraperitoneal installation of mitomycin. In July 1989, the patient was started on selenium-free TPN. In September, she noted tenderness, without spontaneous pain, involving both lateral hip areas and volar wrists. Over the following weeks, tenderness spread to the upper arms, buttocks, thighs, and calves, and the thighs became painful upon stair climbing. She eventually developed a limited painful right shoulder and a sense of morning stiffness involving her fingers, knees, and lower back.

She was seen by this physician in November 1989 and, on examination, was noted to have a very stiff gait and difficulty maneuvering in the examination room. Conjunctivae and oral mucous membranes were normal. There was no cervical lymphadenopathy or thyromegaly. The chest was clear, heart sounds were normal, and breasts were without masses. The abdomen was firm and mildly diffusely tender, without liver, spleen or definable masses palpable. Muscles of the upper arms, buttocks, and anterior and lateral thighs were tender. The right shoulder had limited flexion to 90 degrees. Otherwise, all upper and lower extremity joints had full range of motion without evidence of synovitis. There was a marked strength reduction of left hip flexion and knee extension, and an absent left patellar tendon reflex. Muscle testing and general neurological examination were otherwise normal.

Laboratory data: hemoglobin (Hgb), 10.6 g/dl (1.64 nmol/L); mean corpuscular volume (MCV), 85 ccu (85 fl); white blood count (WBC), 4.0 x 10^3/μl (4.0 x 10^9/L); platelets, 305,000/μl (0.305 x 10^{12}/L). Sedimentation rate, 38 mm/hr. Alkaline phosphatase, 138 IU/L (138 U/L). Routine chemistries were otherwise normal. Iron, 47 mcg/dl (8.4 μmol/L); total iron-binding capacity (TIBC), 407 mcg/dl (72 μmol/L); ferritin, 23 ng/ml (23 μg/L). Prothrombin time (PT), 12 sec; Partial thromboplastin time (PTT), 25 sec. Magnesium, 1.8 mEq/L (0.9 mmol/L). Anti-nuclear antibody (ANA), negative. T4, 7.5 μg/dl (97.5 nmol/L); T3, 15 ng/dl (1.9 nmol/dl); thyroid-stimulating hormone (TSH), 2.1 mU/ml (2.1 x 10^{-3} IU/L). Creatine phosphokinase (CPK), < 20 U/L. Serum selenium, < 50 mcg/L (normal = 55–130 mcg/L).

The patient was treated with selenious acid (200 mcg/day) added to the TPN solution. Muscle tenderness improved. The repeat serum selenium level was 100 mcg/L. Inadvertent discontinuation of selenium was associated with a recurrence of extreme muscle tenderness, but resumption of selenium replacement, again, resulted in a marked reduction of muscle tenderness.

Discussion

Selenium, a trace element, resembles sulfur in many of its chemical properties.[19] It can be incorporated into sulfur amino acids and proteins, and participate in disulfide and trisulfide linkages. The only known human selenoenzyme is glutathione peroxidase, and the presence of selenium is necessary for its synthesis. Glutathione peroxidase catalyzes the reaction:

$$2GSH + H_2O_2 \text{ (or R-OOH)} \rightarrow GSSH + 2H_2O \text{ (or } H_2O + ROH)$$

This enzyme, along with catalase and superoxide dismutase, prevents membrane oxidative damage by hydrogen peroxide and lipoperoxide. A loss of this protective mechanism is postulated as the basis for the various clinical syndromes associated with selenium deficiency.[2,4,6,9,15,20]

The first case of selenium-deficiency myopathy in a patient on TPN was reported by Van Rij and colleagues in 1979.[1] There has since been an intense interest in the effects of selenium depletion and repletion in patients on TPN and in the clinical manifestations of selenium deficiency in this population.

It has been shown that TPN solutions lack selenium unless it is specifically added. After one to two months of TPN onset, plasma selenium levels decrease below the normal range, accompanied by a reduction in erythrocyte glutathione peroxidase.[1] Selenium administration causes restitution of normal plasma selenium levels and repletion of erythrocyte glutathione peroxidase.[2] Subsequent to the initial report, seven patients have been reported with selenium-deficiency myopathy, manifested as muscle pain, tenderness, or weakness that may be accompanied by a gait disorder.[2–7] CPK was elevated in four of these eight patients, and an assay for CPK was not reported in three. One patient presented with painless proximal muscle weakness and a normal CPK.[6] In one patient, muscle biopsy showed a mild increase in central nuclei and in connective tissue between muscle fibers, associated with type II fiber atrophy.[4] Electromyography in two patients showed membrane irritability in one[3] and increased polyphasic potentials with reduced amplitude of potentials in another.[4] All patients experienced reversal of myopathy symptoms after a selenium compound was added to their TPN solutions. Other clinical findings that have been ascribed to selenium deficiency in this patient population are macrocytosis, pseudoalbinism, and white fingernails.[5–7]

In 1981, a patient who had been on TPN for two years developed an acute dilated cardiomyopathy with acute pulmonary edema and ventricular arrhythmias.[8] At autopsy, the left ventricular myocardium showed patchy irregular areas of myocardial cell loss with replacement of fibrous tissue predominantly in the subepicardial and midmural regions. Five similar patients were subsequently reported; two improved with selenium replacement.[9–13]

Selenium deficiency can also result from residence in areas of China, New Zealand, or Finland, all of which have selenium-poor soil.[14] Keshan disease, an endemic cardiomyopathy occurring in an area of selenium-deficient soil in China, is preventable with dietary supplementation with selenium.[14–16] Initially described, in 1935, as an endemic illness in the Keshan area of northeastern China, Keshan disease was manifested by nausea, vomiting, precordial pressure, and death.[15–16] It was soon recognized to be a myocardial disorder. Since 1935, Keshan disease has been identified in a wide belt of China, ranging from the southwest to the northeast, within which there are specific focal areas of high disease incidence.[15] The clinical presentation of Keshan disease ranges from a fulminant onset with cardiogenic shock, acute pulmonary

edema, and arrhythmias, to a latent form with compensated cardiac function.[15,21]

Because an analogy with scleroderma heart disease will be made, it is important to review two studies of the cardiac pathology of Keshan disease.[21-22] The hearts were dilated with either a normal or slightly thickened left ventricular wall, and mural thrombi were frequently present. Patients with acute onset had subendocardial areas of necrosis. Patients with subacute onset had smaller areas of necrosis with a miliary pattern. Patients with a chronic onset had irregular patches of fibrosis streaks. Fresh and old lesions coexisted in the same hearts, suggesting that the illness is not a single exposure to an environmental agent. Miliary foci were usually present around branching types of coronary arteries, producing a "cluster of grapes" appearance. At times, the myocardial lesion was shown to course along the entire length of a straight artery, forming a perivascular cuff. The relationship of the lesions to vessels, the sparing of the innermost myocardium, and the occurrence of fresh lesions around old lesions suggested that pathogenesis is influenced by the pattern of myocardial perfusion. On a microscopic level, there was contraction band necrosis and progressive vacuolization of myocardial cell cytoplasm. Regenerating myocardial fibers were identified. There was minimal or absent inflammation. The pathology of Keshan disease was thought to be distinct from that of congestive cardiomyopathy and viral myocarditis.

The soil in areas in which Keshan disease is endemic is selenium deficient. Wheat, corn, rice, and soybeans grown in these areas contain one-eighth the selenium of grains from unaffected areas.[16] The safe and adequate dietary intake of selenium, as established by the Food and Nutrition Board of the National Research Council, is 50–200 mcg per day, and the daily intake of selenium in the American diet is in the 60–220 mcg range.[18] In the areas of China in which Keshan disease is endemic, average selenium intake is 8.8–12 mcg per day. Patients with Keshan disease have low levels of selenium in blood, cardiac, and skeletal muscle, and in hair. In addition, low levels of glutathione peroxidase and elevated levels of lipid peroxide have been identified in those patients.[20] The elevated lipid peroxide level suggests that oxidative membrane damage is occurring.

Between 1974 and 1976, an extensive controlled study was undertaken to determine whether sodium selenite could prevent Keshan disease.[17] Half of the children studied took a weekly dose of sodium selenite: 0.5 mcg for ages 1–5 and 1 mcg for ages 6–9. Between 1976 and 1977, all children received sodium selenite. In 1974, 54 of 3,985 control patients (13.5/1,000) developed Keshan disease, with a 50% mortality. Only 10 of 4,510 treated patients (2.2/1,000) developed Keshan disease, and there were no deaths. Individuals with Keshan disease in the selenium-treated group had a better outcome than those in the untreated group. In addition, the development of Keshan disease in three of the individuals in the selenium-treated group commenced prior to the fourth dose of sodium selenite.

A similar experience was reported for 1975. By 1977, in 12,749 subjects who complied with the use of supplemental sodium selenite, there were no cases of Keshan disease. Two subsequent controlled prevention studies involving 1.6 million subjects showed an incidence of 0.12–0.27 cases per 1,000 treated subjects and 1.55–3.75 cases per 1,000 untreated subjects.[15] Further analysis showed that many cases of Keshan disease in treated groups involved people who were not taking the sodium selenite. On the other hand, the Chinese experience with Keshan disease indicates that established cardiomyopathy does not improve with selenium supplementation.[15] Based on analysis of grain selenium in affected and unaffected areas of China, the daily selenium intake necessary to prevent Keshan disease is 30 mcg per day.[14]

The highest incidence of Keshan disease occurs in poor families with multiple children in rural and mountainous areas.[14,15] Urban workers living in rural areas have consistently higher hair selenium levels than people living and working in rural areas, and the urban workers are rarely affected by Keshan disease.[14-16]

Keshan disease has a marked seasonal incidence, more frequent in winter in northeastern China and in summer in southwestern China. Selenium status in affected areas does not vary with these fluctuations in disease incidence.[14,15] This seasonal incidence of Keshan disease suggests an infectious factor. Indeed, 56 different viruses have been isolated from cardiac muscle, heart blood, or venous blood from 83 patients with Keshan disease. Most isolated viruses were echo or Coxsackie strains.[15,16] Electron microscopy of 7 of 11 hearts from patients with Keshan disease revealed small (20–27 millimicron) unidentified particles in myocardial cells that were interpreted as possibly viral particles.[16] In a well-controlled experiment, mice fed a selenium-poor diet and injected with Coxsackie B virus experienced more severe myocardial injury than mice fed a diet with adequate selenium. Another factor proposed to be operative in Keshan disease is concurrent Vitamin E deficiency. Vitamin E levels in areas where Keshan disease is endemic are below normal, but are unaffected by selenium status.

Low plasma, serum, or tissue levels of selenium, occasionally associated with low levels of glutathione peroxidase, have been demonstrated in a wide range of acute and chronic illnesses

(**Table**). Low selenium levels have been demonstrated in patients with rheumatoid arthritis—the most extensively studied of the rheumatic diseases. It is most marked in patients with severe disease and improves after successful treatment with gold and penicillamine.

Another study failed to find low selenium levels in patients with rheumatoid arthritis or other inflammatory arthritides, but did note a dose-dependent depression of selenium levels in patients treated with corticosteroids. Controlled and uncontrolled trials of selenium supplementation in patients with rheumatoid arthritis failed to show significant benefit. Reduced serum selenium levels and glutathione peroxidase activity occur in patients with juvenile chronic polyarthritis; the decline in glutathione peroxidase correlates with disease activity. Studies of possible roles of selenium in immune functions and in rheumatic diseases were recently reviewed.[23]

Table. Disease states associated with low plasma, serum, or tissue selenium levels

Low birth weight	Cryptogenic cirrhosis
Hyaline membrane disease	Primary biliary cirrhosis
Bronchopulmonary dysplasia	Intrahepatic cholestasis of pregnancy
Cystic fibrosis*	Intestinal obstruction and intestinal failure
Acute life-threatening illness	Extensive ulcerative colitis
Extensive burns	Crohn's disease
Bacterial infection	Celiac disease
Kwashiorkor	Whipple's disease
Hemolytic anemia of protein energy malnutrition	Acrodermatitis enteropathica
Acquired immunodeficiency syndrome (AIDS)	Carcinoma
Myocardial infarction*	Chronic lymphocytic leukemia
Cardiomyopathy*	Down's syndrome
Chronic renal failure (with or without peritoneal or hemodialysis)	Neuronal ceroid lipofuscinosis
Rheumatoid arthritis*	Myotonic dystrophy
Juvenile chronic polyarthritis	Duchenne muscular dystrophy
Alcoholism and alcoholic liver disease	Low protein diet therapy of phenylketonuria and maple syrup urine disease
Chronic active and persistent hepatitis	Mental retardation, multiple causes

*Contradictory studies

The extensive literature on selenium status in so many disease states invites conjecture regarding possible roles for deficiency of this micronutrient in producing disease manifestations. Known consequences of selenium deficiency, namely, myopathy, cardiomyopathy, macrocytosis, white fingernails and pseudoalbinism, may be manifestations of selenium deficiency. For example, selenium deficiency may play a role in the myopathy of rheumatoid arthritis, alcoholic myopathy and cardiomyopathy, carcinomatous myopathy, steroid myopathy, and myopathy of chronic ipecac ingestion, myopathy and cardiomyopathy of chronic renal failure, and the myopathy associated with acquired immunodeficiency syndrome (AIDS).

It is particularly intriguing to consider the cardiomyopathy and myopathy associated with systemic sclerosis. Contraction band necrosis, a lesion secondary to myocardial cell reperfusion, is found in 40%–77% of systemic sclerosis patients with severe cardiomyopathy,[24] and, as noted previously, contraction band necrosis is a major microscopic lesion in Keshan disease.[21–22] Transient coronary vasospasm episodes have been documented, in conjunction with Raynaud's phenomenon, in patients with systemic sclerosis.[25] Malnutrition and malabsorption of selenium would be reasonably expected to occur secondary to sclerodermatous involvement of the gastrointestinal tract. There are no reported measurements of selenium or glutathione peroxidase in patients with systemic sclerosis. Oxygen radicals are generated when myocardial reperfusion occurs, and they mediate the cellular damage that occurs. Superoxide dismutase and glutathione peroxidase prevent oxygen radical damage to the cellular membrane. In *in vitro* animal models of reperfusion injury, local depletion of glutathione peroxidase and superoxide dismutase occurs. If selenium deficiency is present in systemic sclerosis, it may worsen the inherent glutathione peroxidase deficiency of the reperfusion lesion, and facilitate the hydrogen peroxide oxidative damage produced in reperfusion injury of scleroderma heart disease.

Several papers address selenium deficiency in patients with cardiomyopathy and myopathy. One of the most intriguing is a study of eight patients with AIDS, who had low plasma selenium levels and a nonobstructive cardiomyopathy; the ventricular shortening fraction normalized after dietary supplementation with selenium. In another paper, a two-year-old American child was described with a severe congestive cardiomyopathy and low serum selenium level, hypothesized as the consequence of a diet containing 10 mcg of selenium per day. Cardiac function appeared to improve with selenium supplementation. A subsequent report described a patient with

severe Chrohn's disease and low blood selenium who developed an otherwise inexplicable cardiomyopathy that was reversible with administration of selenium.

Studies of selenium status in patients with cardiomyopathy, however, have been conflicting. One study showed lower selenium levels in patients with congestive cardiomyopathy, 25% of whom had a history of excessive alcohol intake. In that study, serum selenium levels correlated with left ventricular ejection fraction. Similar results were obtained in a study of congestive cardiomyopathy patients, including alcoholic cardiomyopathy patients; a Chinese study of congestive cardiomyopathy patients from urban areas that are not endemic for Keshan disease; and a study of New Zealand patients with congestive cardiomyopathy or ischemic heart disease and congestive heart failure.

On the other hand, another study showed no evidence of selenium deficiency in 21 patients with alcoholic cardiomyopathy. A study of 33 hemodialysis patients failed to find a correlation between serum selenium levels, which were often low, and echocardiographic evaluation of left ventricular function. An additional study showed no decrease in intraventricular septal hypertrophy nor increase in skeletal muscle mass in selenium-deficient hemodialysis patients treated with sodium selenite.

There have been a limited number of studies of selenium status in patients with skeletal muscle disorders. Patients with Duchenne muscular dystrophy and myotonic dystrophy have been shown to have low selenium levels. In Duchenne muscular dystrophy, selenium supplementation has no beneficial effect on skeletal muscle strength or cardiac function. In myotonic dystrophy, a case report and subsequent controlled study demonstrated that treatment with selenium and Vitamin E can improve muscle strength, electromyographic abnormalities, and serum CPK. A controlled study of selenium replacement in New Zealand residents with muscular complaints showed no greater effect than placebo.

Cellular events leading to myopathy and cardiomyopathy as a result of selenium deficiency are unknown. Glutathione peroxidase reduction and subsequent oxidative damage to the muscle cell membranes may be important. Low glutathione peroxidase levels, however, have been shown to be present in healthy residents of areas with selenium-poor soil.

Several animal studies demonstrate the existence of other selenoproteins, and it is possible that these are affected in selenium-deficiency states and may play a role in diseases induced by selenium deficiency. In rats, 82% of erythrocyte selenium and 63% of hepatocyte selenium are bound to glutathione peroxidase. However, 20% of heart muscle and only 5% of skeletal muscle selenium are bound to glutathione peroxidase. Evidence suggests that selenium affects the cytochrome P450 system and induces the synthesis of delta aminolevulinate synthase and hemoxygenase.

Controlled studies of Keshan disease prevention by selenium confirmed the hypothesis that selenium deficiency is necessary for development of the disease. Similar studies are needed to elucidate any relationship between selenium deficiency, myopathy, and cardiomyopathy in chronic disease settings. In addition, studies designed to more precisely define mechanisms of muscle cell damage in selenium deficiency may uncover new aspects of muscle physiology and pathophysiology of wide clinical relevance.

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Vignette of medical history: Toulouse-Lautrec

Joseph M. Miller, M.D.

Dr. Miller is a retired surgeon from Timonium, Maryland.

Recollections of Toulouse-Lautrec bring to mind a gaily-colored scene of Paris nightlife or a marvelous painting of the Moulin Rouge. An earthy man, he provided his audience with paintings of cancan dancers, models, tarts, and circus performers with swift, sure strokes.

He had the ability to simplify the line and color of a scene to present its quintessence. He was the first major figure in a new art form—the poster—and, in his day, was perhaps better known for his achievements in this medium than in the usual art forms.



Figure 1. Henri Toulouse-Lautrec.
Reprinted with permission from Nagle JJ. *Heredity and Human Affairs.* Saint Louis: The C.V. Mosby Company. 1974; 152.

His artistic nature was not matched by physical size **(Figure 1).** The adult Lautrec was only about five feet tall because of a genetic defect. At times, he was considered an achondroplastic dwarf, but subsequent study has suggested another diagnosis.

Henri Toulouse-Lautrec was born on November 24, 1864, of parents who were first cousins. They were healthy, and a history of dwarfism was not present in the family. Gross deformities were not evident in the neonatal period. A brother died of an unknown cause at the age of one year.

Henri was a frail child, and although he did well in his early school years, his parents withdrew him from school for private tutoring. He fell and fractured his left femur in 1878 and experienced a similar break on the right side one year later.

During his teen years, his legs stopped growing, although his torso was normal. He was a friendly, though short individual. A thick nose, big lips, and a retreating chin gave him unique facial features. He walked with a

waddle and always carried a cane. Unfortunately, his life was shortened by alcohol and syphilis, and he died at the age of 36.

Maroteaux and Lamy first described pyknodysostosis in 1962,[1] and then reported the instance of Lautrec in 1965.[2] These initial descriptions were followed by excellent contributions from Ellmore et al[3] and Sandano, Gorlin, and Anderson.[4] The latter publication is a literature survey of 73 cases in 51 families. The syndrome is characterized by dwarfism, osteopetrosis, partial agenesis of the terminal digits of the hand and feet, cranial anomalies, frontal and occipital bossing, and hypoplasia of the angle of the mandible.

Lautrec was the victim of a disorder belonging to a group of poorly understood congenital anomalies. One pleiotropic gene may account for the multiple phenotypic effects.

An important argument in favor of the autosomal recessive transmission of this disease may be the familial consanguinity noted in the family history. Sandano et al, after a study of their collected cases, concluded, however, that consanguinity may not play a role as its rate did not differ materially from the nonsanguinous type. Their data was compatible with an autosomal recessive mode of inheritance. An increasing number of literature reports in the last decade testify to a greater interest in this genetic disease.

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Med Chi Bicentennial Celebrations

Med Chi has already begun planning celebration activities for its bicentennial in 1999. If you have ideas or suggestions, please call Margaret Burri or Vivian Smith at 410-539-0872 or 1-800-492-1056.

Imaging Case of the Month

A 20-year-old Bolivian man presented for evaluation of a new-onset seizure disorder. He was well until May 1992 when he noted an episode of dizziness, followed by witnessed tonic-clonic activity and subsequent postictal confusion. The occurrence of a similar episode one month later prompted medical evaluation. Apart from the two seizure episodes, he denied any other symptoms. Specifically, there was no history of headache, change in vision, fever, or focal weakness. The physical examination was completely normal, as was the neurologic examination. There was no evidence of papilledema, cardiac murmurs, or neurologic deficits. A head computed tomography (CT) scan was performed at the referring institution **(Figure 1)**. Subsequently, a magnetic resonance imaging (MRI) study was performed **(Figures 2-4)** to better define the abnormality seen on CT.

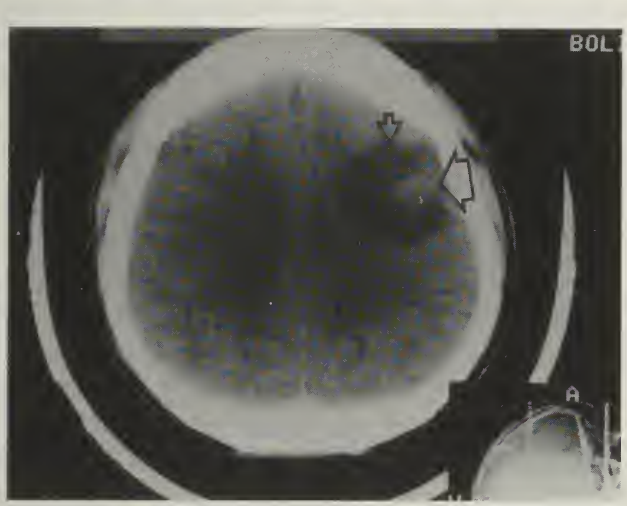


Figure 1.



Figure 2.



Figure 3.

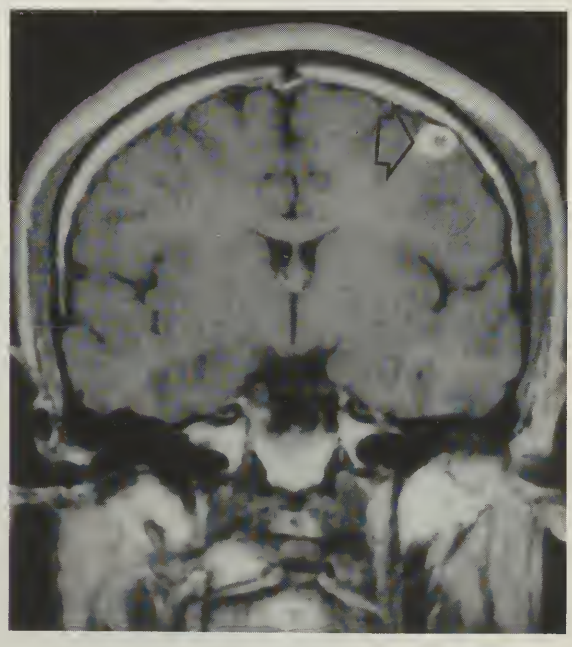


Figure 4.

Parenchymal neurocysticercosis

Figure 1. Head CT (axial section) showing a left frontoparietal lesion (large arrow) with surrounding edema (small arrow).

Figure 2. Head MRI (T_2-weighted axial section) showing significant white matter edema (arrow) surrounding the left frontoparietal lesion.

Figures 3 and 4. Head MRI (axial and coronal sections after administration of gadolinium) showing ring-enhancement of the lesion (arrow) in the left frontoparietal region.

Neurocysticercosis, considered one of the most common parasitic diseases of the central nervous system (CNS), occurs via the ingestion of viable eggs of the pork tapeworm *Taenia solium*, typically found in contaminated uncooked or undercooked food. Once in the digestive tract, the eggs hatch, liberating the embryonic organisms, which then cross the intestinal wall, enter the circulation, and finally localize in tissues such as skeletal muscle, the eyes, and the brain. Tissue cysts tend to form over a two-month period and may remain viable for as long as 10 years. Patients with CNS parenchymal cysts may be asymptomatic until the organisms die, at which time an acute inflammatory reaction occurs within the brain. It is often at this point that patients develop seizures or focal neurological signs. Without therapy, the inflammation eventually resolves, leaving a calcified granulomatous lesion that may serve as a focus for recurrent seizure activity.[1]

The radiographic findings of cysticercosis are somewhat variable. Plain films of the extremities and the skull may reveal small scattered calcifications representing dead cysts. A number of characteristic findings are seen with CT. Nonenhancing low-density regions represent viable cysts with immune tolerance. Hypodense or isodense ring-enhancing lesions with surrounding edema represent the acute inflammatory phase of parenchymal disease, which occurs as the organisms begin to die. Occasionally, diffuse brain edema may be seen in conjunction with multiple enhancing lesions (cysticercal encephalitis). CT may also reveal scattered intraparenchymal calcifications characteristic of destroyed cysts.[1,2] MRI is less useful for the localization of brain calcifications. It is, however, more sensitive than CT and may allow identification of additional viable cysts not otherwise seen on CT.[3] While there is no specific pattern of cysts (patients may have multiple or single lesions), cases with multiple lesions predominate. It may not be possible to radiographically differentiate between neurocysticercosis and other intraparenchymal lesions (such as tumor, tuberculosis, or brain abscess), especially in the setting of a single lesion.[3]

Diagnosis often demands a complete travel history, since the disorder is endemic in many parts of the world, especially Latin America. It is the most common cause of new-onset seizures in adults in Mexico and is a major contributor to adult-onset seizures in Peru.[4,5] Increasing numbers of cases have been reported in the United States due to the rising numbers of immigrants and refugees from developing countries.[6,7] In patients with the possibility of neurocysticercosis, imaging studies (CT or MRI) may help suggest the diagnosis, especially if scattered CNS calcifications are present. The most reliable serologic test is an enzyme-linked immunotransfer blot assay performed on serum. This assay, performed at the Centers for Disease Control and Prevention in Atlanta, has been shown to be 100% specific and 98% sensitive in biopsy-proven cases of

PHYSICIAN AUTHORS WANTED

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Parenchymal neurocysticercosis

neurocysticercosis, and appears to be the preferred method of making the diagnosis. Sensitivity is reduced somewhat in patients with single enhancing lesions or calcified granulomas.[8] Rarely, brain biopsy may be required for a conclusive diagnosis.

Treatment is advocated, not only to eradicate the organisms, but to reduce the risk of a subsequent persistent seizure disorder.[9] Therapy involves treatment with praziquantel as well as anticonvulsants (if required). Albendazole has also been shown to be effective. Occasionally, steroids are required in settings with progressive, symptomatic parenchymal edema. Usually, these can be tapered rapidly after completion of the cysticidal therapy.[1]

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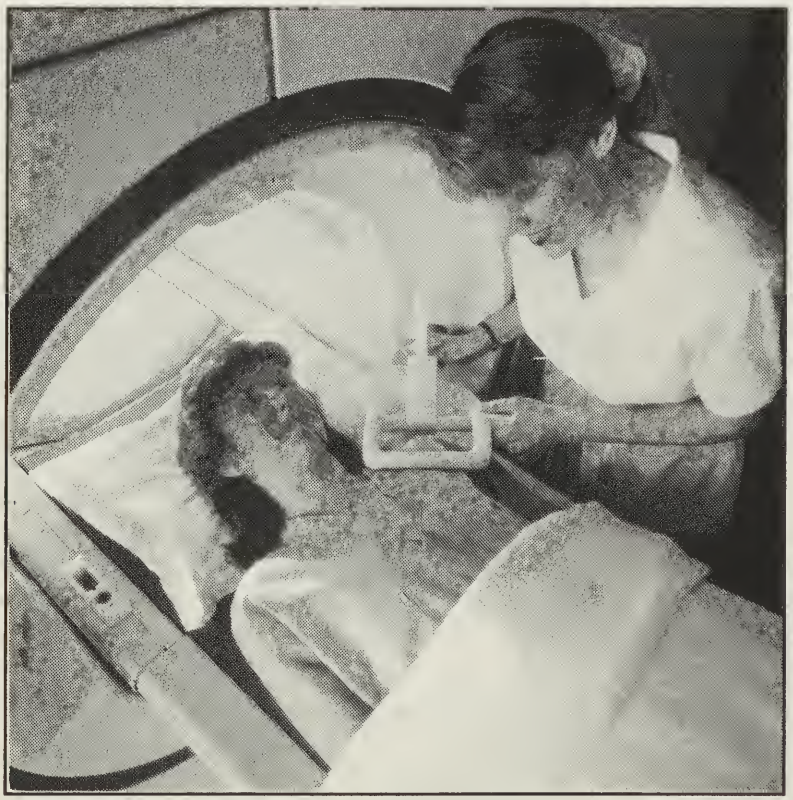
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Book Reviews

Miners and Medicine: West Virginia Memories. Claude A. Frazier, M.D., with F.K. Brown. Norman, Oklahoma: University of Oklahoma Press. 1992. 131 pages. $19.95

Don't call me, Saint Peter,
cause I can't go,
I owe my soul to the
company store.

Old mining song.

The termination of Civil War hostilities was almost immediately followed by the opening of the industrial revolution in the United States, when a group of unusual individuals made their mark on the national scene. Warlike and pitiless, they became the strange new soldiers of economic life. America was a paradise for the entrepreneur capitalist because of the laissez-faire political attitude of the federal government, coupled with the votes of easily purchased legislators. Self-interest dominated the lives of this imaginative breed. Some have labeled them greedy because of their enormous financial success. The list is long: Astor, Vanderbilt, Cooke, Gould, Carnegie, Morgan, and Rockefeller. To these, Frazier and Brown have added the many who became the pirates of the coal fields.

Frazier, whose father was a doctor and whose mother was a nurse in the coal camps of West Virginia, tells of his personal experiences with the horrible conditions extant in the coal fields of Appalachia until relatively recent times. The reader may actually envision the appearance of the four horses of the Apocalypse in these areas: war, famine, pestilence, and death. The history of coal mining is a wretched tale without redeeming features. These circumstances existed primarily because of the avarice of company owners who installed a virtual feudal system in the mining areas.

Miners and their families were totally dependent upon the company for wages, homes, food, health care, and education. Contact with the external world was minimal as this aspect, too, was controlled by the corporation.

The century following the Civil War saw the rise of the US coal mining business in order to supply the energy demands of industry, which expanded at a dizzying rate. Coal was first obtained by pick, shovel, and wheelbarrow. As surface mines became barren, tunnels were dug, and tracks laid in them. Initially, cars were pushed along rails, but later they were pulled by mules or ponies. Deep ground penetration produced serious problems occasioned by carbon dioxide (chokedamp) and carbon monoxide and methane (firedamp). Asphyxiation, explosions, and wall collapse were not infrequently seen.

Paid only once a month and frequently in company scrip, miners were eternally in debt. Cash flow was reduced and the company's monopoly on many aspects of a miner's life was tightly maintained. Families lived in wooden houses provided by the company. Cheaply built, these shacks afforded little protection against the cold, damp, and filth. Sanitation was virtually nonexistent; water was obtained from springs as few houses had running water. Outdoor privies dotted the hillsides and served most of the area. Often, these wretched sanitary facilities were in close juxtaposition to water supplies, so that contamination was frequent and noxious.

Another horrible feature characterizing the camps was child labor. Many youngsters were employed as "trapper boys" who opened and closed the trap doors for the animals as they hauled coal cars in and out of the mines. Other children were "breakers" who swung heavy hammers and broke up large pieces of coal. This dirty job blackened their skin and filled their lungs with coal dust.

This aspect of the industry was particularly obnoxious, but the federal and local governments did little to correct the

situation for a prolonged period. Three unsuccessful attempts to control child labor by federal legislation were made in 1916, 1919, and 1933. The acts of 1916 and 1933 were declared unconstitutional, and not until 1941 was such legislation approved by the US Supreme Court. Beneficial change was then the order of the day.

The practice of medicine was difficult in these early years. Few trained physicians wished to work in the camps, so care was provided by self-proclaimed doctors or apprentices. The establishment of medical schools and licensing examinations led to a gradual displacement of yarb (herb) doctors, midwives, and "grannies." Specific medication was often lacking, and reliance was placed on patent medicines. Many of these nostrums contained alcohol or opium, which led to addiction.

The early coal-camp doctor received relatively little training before being licensed. Physicians were hired by the company and paid by assessment of the miners. Fees covered all medical care save deliveries and surgical procedures, for which the doctor was permitted to charge a little more. Frazier's father delivered more than 1,000 babies while practicing in the coal fields, but did not receive payment for 245 of them. Imagine having 24 office visits every day of the year, and then making house and hospital calls. In addition, poor roads made home visits difficult and exhausting.

Seriously ill or injured patients could not be kept at home without risking prolonged morbidity and mortality. For many camp towns, the hospital was a good distance away and could only be reached by a rough wagon or train trip. One of the many coal camp doctors was Henry Hatfield, a future governor, who finally persuaded the West Virginia legislature to establish three public hospitals for miners. Other patients might be admitted, but they had to pay, while lumberjacks, railroad workers, and miners were treated without charge.

Silicosis and anthracosis have claimed the lives of an undue number of miners. One of the more flagrant episodes of silicosis, a practically unsupervised period of injury, occurred during the construction of the Hawk's Nest tunnel. Workers became ill and died, with the death toll being at least 476 during the 18 months needed to complete the project. The problem of anthracosis was much greater in the coal areas, and it has been estimated that at least 365,000 miners were killed or disabled.

Happily, conditions have improved as mines are now well ventilated. New machinery to preclude the back-breaking labor previously involved, self-contained respirators to prevent asphyxiation, and far better medical care are now provided.

Problems still exist in these areas, however, as not all houses have indoor plumbing, and some creeks still contain raw sewage. Adequate medical care in some areas is still lacking, and serious illness or injury necessitates a trip to an urban center for specialized treatment. The coal-camp doctor of the past has disappeared, and, in many areas, modern clinics, up-to-date physician offices, and good hospitals have replaced the old rough-and-ready therapy.

In retrospect, this book will appeal to all who wish to learn about the customs and spirit of these early days in the Appalachian mines. The lore of medicine is not stressed, but readers will appreciate the tremendous difficulties under which the coal-camp doctor worked. The concern exhibited by miners and their families when trouble arrived for others is impressive. To some, the techniques for removing coal from the earth will be interesting and become apparent for the first time. The book is definitely recommended for a pleasant evening of reading.

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■ ■ ■

Travel and Routine Immunizations. A Practical Guide for the Medical Office. Richard F. Thompson. Milwaukee: Shoreham Medical Marketing, Inc. 1993. 96 pages. $12.95.

This publication is another indication of the quantum jump made in international travel management since wind-driven ships were used in the Mediterranean Sea. When east met west at Venice in the middle of the 15th century, travelers and goods were quarantined for 40 days to insure that contagious diseases would not enter the country. Health organizations are still concerned about the importation of infection, but knowledge about their causes and the creation of preventive vaccines have tremendously eased the health threat of traveling.

All travelers abroad from the United States will have similar questions. One most frequently asked is "What immunizations do I or members of my family need?" Requirements vary by country and are subject to change, as are the preparations used to confer immunity. Foreign governments design requirements to protect their own citizens from disease translocation, and travelers, of course, wish to avoid endemic infections.

At the moment, yellow fever is the only immunization that should possibly be required for entry into any country. Cholera vaccination, except under certain circumstances, is not required. Other inoculations may be recommended, but are not required. Health preservation by travelers will demand that certain precautions be taken, however, so some routine vaccines should be given.

This book enables physicians and health care providers in corporate centers to provide reliable information about the necessity and details of immunization. A further purpose is to make recent information readily available to pediatricians

who may be concerned with preventive immunology.

Because a projected itinerary may expose a transient to a completely different health environment, preparations to prevent illness should be made. Thompson gives good advice when he suggests that, ideally, the international wayfarer should see a doctor at least eight weeks before departure time. At that time, the physician should review previous immunizations and arrange an administration schedule that should end well before the projected leaving date.

The review should include

- Country-specific requirements;
- Current advice as to the presence of diseases in the country to be visited;
- Medical problems that might be encountered;
- Dangers of mosquito and tick bites, and how to avoid them; and
- An explanation of jet lag, food and water sanitation, hazards of swimming in fresh water, and first aid measures.

The author states the book will be most helpful when a suggested sequence of steps is initiated:

1. Review the patient's itinerary to help identify the correct immunizations.
2. Complete the International Health Medical Questionnaire.
3. Complete the International Certificate of Vaccination, which the traveler should always carry.
4. Ensure that the itinerant is thoroughly cognizant of the immunizations given.

Misconceptions concerning vaccination contraindications are reviewed carefully. A detailed list of conditions inappropriately regarded as such are discussed fully.

Routine immunizations to be considered for those who travel to other lands or for immunization of children in their early years include

- Diphtheria, tetanus, and pertussis (Adults should have tetanus and diphtheria only)
- Hemophilus influenza, but only for children five years of age and under
- Influenza
- Measles, mumps, and rubella
- Pertussis
- Poliomyelitis (Adults do not need a routine booster dose.)

Immunizations to be considered for all travelers depending on international requirements, local conditions, and length of stay embrace include

- Cholera (Although cholera is a major health consideration in many developing countries, it does not officially require vaccination. In some countries, however, travelers leaving areas in which cholera is endemic may still be expected to show immunization proof upon entering other regions.)
- Hepatitis B (Hepatitis B vaccination is recommended for travelers who expect to live in an endemic area for more than six months, those who may come into contact with local blood, and those who might have sexual contact during their stay.)
- Japanese encephalitis
- Meningococcus
- Plague, but only in in very special instances
- Rabies
- Tick-borne encephalitis
- Typhus
- Yellow fever

Each vaccine is discussed under general information; doses for adults and children; side effects; precautions; compatibility; pregnancy; and special considerations. Pregnant, pediatric, and corporate travelers present particular problems, and plans to avoid complications should be made before departure. Individuals who have AIDS (acquired immunodeficiency syndrome) and those who are positive for HIV (human immunodeficiency virus) are at special risk during travel abroad.

Careful attention must be given to the storage and handling of vaccines to insure that they maintain potency and are not a source of infection. Consummate care will maintain, in good supply, the numerous different vials necessary for a varied practice. An ongoing inventory is the only way to keep pace with the demand.

The book concludes with a resource directory from which further details may be obtained. Manufacturers of all vaccines are identified. Of more than casual interest is the fact that instant access to health regulations of more than 200 countries may be obtained at the place of publication (Shoreham Medical Marketing) through a facsimile (FAX) machine.

The book fulfills its purpose and should be a much used resource for doctors and health care providers who prepare individuals for foreign travel. The instructions are easy to follow and should help considerably in the immunization process.

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■ ■ ■

Julius Preuss' Biblical and Talmudic Medicine. Translated and edited by Fred Rosner. San Hedrin Press: New York. Originally published in 1911, reprinted in translation in 1978, and reprinted in German in 1989. 652 pages.

Ancient books and their knowledge are often available only to professionals, and, therefore, a great literary event occurs when the lore of antiquity is explored and well reported in a modern book. Julius Preuss takes us back through the centuries and gives us a veritable treasure trove of information about ancient Jewish medicine, which will attract medical historians' attention. Written Jewish medical works did not exist in antiquity, but the knowledge was

not lost. Preserved by oral transmission, references to medicine and its practice may now be found in Jewish sacred, historical, and legal literature.

Studies of Biblical and Talmudic medicine had preceded Preuss' work, but they were written by laypersons or physicians unfamiliar with the Semitic language and literature. Preuss was extremely well qualified for this literary venture because he was an excellent doctor and a thorough Semitic savant. Having produced a critical, extensive, and reliable Jewish historical literature summation, he may well be recognized as a prime exponent of Jewish medical intelligence.

A German Jew born in 1861, Preuss was a brilliant scholar who graduated in medicine with high honors from the University of Berlin in 1886. After a short period of practice in his hometown, he returned to Berlin where he became a successful general practitioner. He also matured into a learned Hebrew scholar. This dual preparation eminently qualified him to do the necessary research to write this book.

Ancient Jewish literature begins with the Pentateuch (Torah), and Preuss' studies are based on the Masoretic text of the Bible. In addition, the "oral law" which explains and supplements the Bible was explored. (Oral transmissions were enriched by exegesis and rabbinical ordinances until a collation of this material, the Mishnah, was made at the end of the second century. The totality of the Mishnah, Tofseda (additional Mishnah), and learned digressions is called the Gemora and is the data bank Preuss used to write his book.)

Talmudic medicine began about 2000 BC in the grazing lands between the Euphrates and Tigris rivers. It continued as Abraham and his descendents peopled the Fertile Crescent.

This reliable, comprehensive, and scholarly report reviews the full range of extant medical knowledge including anatomy, diseases and their treatment, sex, diet, obstetrics, mental health, and legal aspects. The 19 chapters are devoted to the main topics, and each division contains footnote references to the sources of the material under discussion.

Chapter-end references are also present, and, although not exhaustive, they have depth. A marvelous index written by Robert J. Milch cites the location of relevant material in the Hebrew Bible, and Apocrypha and Pseudepigrapha, the New Testament, and the Talmud. A subject index concludes the book.

Vignettes are frequent throughout the text. References to diseases and their treatment are explicit. In 2 Kings 20, we read that Hezakiah was extremely ill with a severe cutaneous infection. Isaiah treated the area by placing a lump of figs on the site. This episode was perhaps the forerunner of infections therapy with the proteolytic enzymes that became popular about 2,500 years later.

Remarkable also was recognition of the genetic transmission of hemophilia through the female as mentioned in the Babylonian Talmud written in the third century and referred to in subsequent texts. The Talmudic decree that the sibling of two brothers who had died of bleeding after circumcision need not be circumcised is codified by all rabbinical authorities.

This book is an unsurpassed fount of historic Jewish medicine. Comprehensive in scope and impeccable in scholarship, it demonstrates that early Hebrew doctors had considerable insight into disease and healing. Medical historians, Biblical students, medical practitioners, and medical students will appreciate reading this excellent book. Every medical library should possess a copy.

Even when only a short distance into the volume, the reader may feel like Aladdin when he rubbed his wonderful lamp to reveal new delights. Candidly, the book will add nothing new to modern medicine, but it will instill a sense of admiration for those ancient health providers who learned so much from so little and provided some of the roots of modern medicine.

One studies Latin to learn the English language, and, in a parallel sense, the work of these early practitioners should be read to understand present day medicine to a greater extent.

The 1911 edition was reprinted in 1989 in German. Readers of the language might gain a greater rapport with the contents if they read the original text and experience the idiom of the time.

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Forty years ago

Forty years is a fascinating interval. It can be seen as a generation—four decades of change and advancement: new medications, new diagnostic tools, and new techniques and procedures.

On the other hand, human nature may not have changed very much. *Plus ça change, plus c'est la même chose.*

Excerpts from the past are selected to remind us of our limitations. Some limitations of the past may seem silly in today's scientific light, but others may point out the ignorance of today and the need to mush on with some humility.

1953:
Nixon was in office, a heartbeat away from the presidency.
Krebs was a Nobel Prize winner.
Australia beat the United States to retain the Davis Cup.
The CPC reprinted here illustrates the easy recognition and helplessness in management of kidney disease. How will a CPC of a 1993 AIDS (acquired immunodeficiency syndrome) patient seem to readers of 2033?

JOHN W. BUCKLEY, M.D.

*1953: Clinical Pathological Conference**

Reprinted from the *Maryland State Medical Journal* 1953; 2(1): 33–37.

W.B.; colored male, age 24; autopsy #5862; chart #31427. Admitted: January 6, 1950; Died: January 23, 1950.

Clinical history

This patient was a 24-year-old porter who was admitted to the University Hospital on January 6, 1950, with complaints of drowsiness and disturbances of vision. His illness is said to have started in September, 1949, when he became so sleepy that he could not work efficiently. Sleepiness came on at any time and persisted until his admission to the hospital. He stopped work about December 29, 1949, and at the same time began to vomit and complain of blurring of his vision in one eye. Nocturia was described for about two months, and his appetite had been failing for the same time.

The past history was negative with the exception of the recognition of hypertension in 1942, when he was refused admission to the army. There was no history of tonsillitis, scarlet fever, or urinary tract infection.

Physical examination was recorded as follows: The patient is a well-developed, slightly undernourished Negro male of

Presented at the Annual Meeting of the Medical and Chirurgical Faculty of April 29, 1952, by the University of Maryland, School of Medicine (Transactions *1952).*

24, who is lying flat in bed in a lethargic state. He responds sluggishly to questioning, but dozes off during examination. The breath is foul, but there is no odor of ammonia. The skin is dry and turgor is poor. There is no striking evidence of weight loss, and muscular development is good. There is no lymphadenopathy. The hair and scalp are negative. The pupils react, and ocular movements are normal. There is slight periorbital edema. Ophthalmoscopic examination reveals normal nerve heads. The retinal arteries are markedly tortuous and constricted, with many flame shaped hemorrhages of varying sizes. There are a number of scattered yellowish to white fluffy exudates. The nasal septum is in the midline. The sinuses transilluminate well. The oral mucous membranes are dry. The teeth are stained, there is moderate pyorrhea. The tonsils are small. The trachea is in the midline. The thyroid is not palpable, and there is no cervical adenopathy. The chest expands well, and respiratory rate and rhythm are normal. The lungs are resonant, and breath sounds are vesicular. A moderate number of medium rales are audible over both lower lobes. The cardiac outline is normal. The sounds are regular with rate of 100. There is a gallop at the apex, and the first sound is followed by a systolic murmur which is not transmitted. The second aortic sound is accentuated and split. Blood pressure is 260/160. The abdomen is soft. The liver edge is palpable about one inch below the costal margin. The kidneys and spleen cannot be felt. Genitalia are normal, and rectal examination is negative with a small, nontender prostate gland. The extremities are negative with no evident thickening of peripheral arteries.

Throughout his stay in the hospital, the patient's urine showed constant specific gravity varying between 1.010 and 1.012. Large amounts of protein were present in all specimens, estimated at 8 grams per liter. Microscopic hematuria was present in half the specimens examined. Hyaline and granular casts were also described. The stool contained a trace of blood on chemical examination. Phenolsulfonphthalein excretion was less than 5% in one hour. Hemoglobin was 10.8 gm or 76%. The leukocyte count was 8,100 with a normal differential formula.

On the morning after admission, blood urea nitrogen was 150 mgm. Blood sugar was 88 mgm and the CO_2 combining power was 49 vol per cent, or 22 mEq per liter. The serum chloride was 76 mEq. The plasma protein was normal. On January 10, 1950, the blood urea nitrogen had risen to 164 mgm and the serum chloride was further depressed to 63 mEq. The blood CO_2 combining power had risen to 58 vol per cent, probably because of continued vomiting.

After intravenous administration of sodium chloride and glucose, the blood urea nitrogen fell to 170 mgm, but later rose to 188, and terminally to 260 mgm. The serum sodium, which was depressed to 109 mEg on January 12, rose to 123 on January 21. However, the serum potassium, which was 3 mEq on January 10, rose terminally to 6.9 on January 21.

X-ray of the chest, which was taken on January 6, 1950, was normal. There was no demonstrable cardiac enlargement. The electrocardiogram showed some nonspecific abnormalities including depression and arching of the ST segment in Lead 2, with late inversion of the T waves in Lead 1, 2, and 3.

The patient continued to go downhill in spite of therapy. An attempt was made to give him the so-called Kempner rice, fruit, sugar diet, but this was not tolerated because of continued vomiting. Intravenous feeding with glucose was continued until death with efforts at correcting uremia and electrolyte balance by administration of sodium chloride. The patient died on January 23, 1950, at 4:30 a.m., after continued stupor developing into coma. Terminally, uremic frost was observed.

Dr. T. Nelson Carey: The patient whom we are to discuss this morning does not present a very obscure clinical picture but serves quite well as a teaching problem.

The man was a Negro of 24 who was admitted to the University Hospital, January 6, 1950, and died January 23. He was a porter, and at the time of admission complained of drowsiness with some disturbance of vision.

I believe that we all agree that this patient was uremic and that he died of that abnormality. Uremia may be defined as a symptom complex or syndrome which arises from retention within the body of those constituents which are normally excreted in the urine. For years there have been many attempts to explain the uremic state. It is obviously not caused by retention of urea, as this material is almost completely harmless. Some uremic patients are ill because of acid retention, though this man was not acidotic. Acidosis, when present, is caused by retention of acid phosphate. Usually the uremic individual tolerates acidosis quite well, even though it produces the type of dyspnea known as Kussmaul breathing. During the last seven or eight years since the chemistry of potassium has been more closely followed, it has been learned that the uremic individual commonly has elevation of this element in his blood plasma, and that potassium retention may be an important factor.

Actually, however, the picture of uremia is probably caused by a mixture of measurable abnormalities and others that cannot be directly determined. Anemia may be an important side effect, as the uremic state depresses the bone marrow's ability to manufacture blood.

In attempting to come to a conclusion as to the cause of our patient's uremic state, several causes of nitrogen retention may be dismissed without difficulty. The so-called prerenal azotemia

associated with pyloric obstruction and vomiting, the nitrogen retention following gastrointestinal hemorrhage, and the so-called lower nephron nephrosis that is associated with shock, transfusion reactions, and bichloride poisoning all may be dismissed without discussion. Another very important group of diseases of the kidney that may be associated with uremia and occasionally with hypertension are those in which the lower urinary passages are obstructed, either as high as the kidney pelvis or as low as the urethra. This group may be called the "obstructive uropathies." It is a most important group of diseases because the relief of obstruction may either improve or cure the illness. Ureteral stones, prostatic hypertrophy, ureteral obstruction by carcinoma in the female, must all be considered, and proper studies instituted. Cystoscopic examination and retrograde pyelography was not done on our patient, though I doubt very much if any pathology would have been discovered.

I believe that we may narrow our search down to uremia that is characterized by disease of the kidney itself. A number of these can be ruled out without much discussion. Pyelonephritis is a common cause of uremia. It is most important because it is preventable in its early stages. It is characterized, of course, by infection and obstruction of the kidney pelvis and ureters. It is occasionally associated with hypertension. Almost always, the microscopic urine examination shows polymorphonuclear leukocytes. It is more common in women than in men. I believe that our patient showed very little to suggest this disease, as the microscopic examination of his urine did not demonstrate pus, and there is nothing to suggest obstruction of urine flow.

Polycystic disease of the kidneys usually becomes evident at the age of 50 or 55. As a rule, the kidneys are quite large and easily palpable.

Diseases of the kidney such as tuberculosis, multiple infarction, and amyloid can cause uremia, but almost invariably the blood pressure is quite low and I believe that they may be eliminated from serious consideration.

I believe that we must narrow our differential diagnostic discussion to the differentiation of glomerular nephritis and malignant hypertension or arteriolar sclerosis. The choice is a very difficult one to make satisfactorily, as at the end of the patient's course, the pictures may be identical.

You will remember that the physical examination described edema of the orbits in spite of vomiting and dehydration. This and the large amount of protein in the urine tempts me to suggest glomerular nephritis. We know that the precipitating streptococcal infection may be also forgotten in the patient's past history, and we also know that uremia is more usually the end result of glomerular nephritis than it is of hypertension as such.

Actually, any attempt at differentiation of these two diseases in the terminal state is of purely academic interest. Terminal uremia from either cause cannot be cured. There is also very serious doubt that recognition of the illness several years before would have allowed it to be treated in a reversible state. During the past few years, total adrenalectomy has been attempted on patients with malignant essential hypertension, and some are said to be benefited decidedly, even though they accept the inevitable Addison's Disease.

In coming to a definite diagnosis, I must confess to the audience that I discussed this patient once before in a clinical pathological conference for the senior class of the University of Maryland School of Medicine. At that time I made a diagnosis of chronic glomerular nephritis with uremia. I now know that that was a wrong diagnosis, but in the interest of consistency I must make it again. Dr. Gardner Warner will tell you the proper diagnosis and discuss the picture for you.

Dr. C. Gardner Warner: *Anatomical Diagnosis*: Arteriolar nephrosclerosis, necrotizing; diffuse hyperplastic arteriolar sclerosis; left ventricular hypertrophy; focal myocardial fibrosis; fatty degeneration, myocardium; serifibrinous pericarditis; pulmonary edema.

The body is that of a well-developed, well-nourished, young colored male. External examination shows little of note. The peritoneal cavity contains no excess free fluid. The liver is somewhat enlarged. The other abdominal viscera are normally disposed. About 200 cc of serous fluid are seen in each pleural cavity. Old fibrous adhesions are found between the upper lobe of the right lung and the chest wall. The pericardial sac is distended; it contains about 500 cc of yellowish fluid. The epicardium is dulled by fine strands of fibrin. The heart weights 600 gm. The wall of the right ventricle measures 5 mm in thickness and that of the left ventricle 22 mm in thickness. The valves appear normal. Beneath the mural endocardium, yellowish flecks characteristic of fatty degeneration are noted.

The kidneys, right and left, weigh respectively 150 and 200 grams. The capsules are slightly adherent and the cortical surfaces are somewhat granular. Small areas of hemorrhage are seen beneath the capsules and in the cortices of both kidneys. The principal histologic changes in the kidneys are those observed in the arterioles. The walls of the afferent glomerular capillaries are quite thick; they are acidophilic and smudgy in appearance. Similar focal changes are noted in the capillaries of the glomerular tufts. Hemorrhage is seen in some of the subcapsular spaces. Some of the tubules are atrophic and collapsed; others are dilated and contain hyalin and red cell

casts. The arterioles in other organs, notably the pancreas, show changes similar to those seen in the kidneys.

This is a case of primary or essential hypertension.

Discussion

Primary or essential hypertension has been so called because there seems to be no proven primary lesion. It has been clinically divided into benign and malignant types on the basis of duration and rapidity of progression. For a long time, it has been recognized that renal arteriolar sclerosis is an almost constant postmortem finding in essential hypertension. The arteriolar sclerosis is often, but not always, a generalized change. It is seen in the spleen, pancreas, adrenals, brain and heart, but it is only in the kidneys that this hyperplastic arteriolar thickening and hypertension seem to have a close correlation. There is still some uncertainty as to whether it is a cause or effect relationship.

The importance of renal vascular changes in hypertension have been pointed out and emphasized by Goldblatt and others, who have demonstrated that ischemic renal tissue releases a pressor substance into the circulation, which by its constrictive action on peripheral vessels, produces hypertension.

Whether the process is benign or malignant, it seems that the pathogenesis is fundamentally the same. The malignant form occurs particularly in young adults, especially the Negro male, as in this case. It is more rapidly progressive and has severer lesions, but follows the same pattern of arteriolar nephrosclerosis and cardiac hypertrophy, with renal, rather than cardiac failure. Pathologically, the malignant variety is characterized by a smudgy hyalin necrosis of small arteries and afferent glomerular arterioles, with small hemorrhages from severely damaged vessels. This necrotizing arteriolitis may produce some inflammatory cellular response. It may extend and involve glomerular capillaries with hyalin thrombosis or capsular hemorrhages. The pathologic findings may be modified somewhat when a benign hypertension has a superimposed malignant terminal phase. In the latter case, varying chronic changes, with hyalinization, glomerular atrophy, and tubular collapse are present, in addition to the patchy necrotizing arteriolitis and hemorrhage.

In the case under consideration, such must be the final conclusion. The eight-year history of hypertension, a 600 gm heart, widespread hyperplastic arteriolar changes, granular kidneys with chronic glomerular and tubular changes, make the process one of relatively slow evolution.

The case is, therefore, one of benign essential hypertension and nephrosclerosis with a terminal malignant phase and death by renal failure.

T. NELSON CAREY, M.D.
Dr. Carey was professor of clinical medicine, University of Maryland, School of Medicine.

C. GARDNER WARNER, M.D.
Dr. Warner was associate professor of pathology, University of Maryland, School of Medicine. ■



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Medical Miscellany

Med Chi's sister—the Kanagawa Prefectural Medical Association

The Maryland Delegation to the American Medical Association (AMA) was pleased to have the opportunity to meet with Ryohei Kawaguchi, M.D., during the AMA annual meeting in Chicago, June 11-17, 1993. Dr. Kawaguchi is president of the Kanagawa Prefectural Medical Association in Japan.



Figure 1. Hiroshi Nakazawa, M.D., chairperson, Public Relations Committee, and Ryohei Kawaguchi, M.D., president, Kanagawa Prefectual Medical Association, Japan, address members of the Organization for State Medical Association Presidents at the AMA annual meeting.

On June 11, Dr. Kawaguchi attended a meeting of the Organization for State Medical Association Presidents, at which he compared and contrasted the health care systems of Japan and the United States. Hiroshi Nakazawa, M.D., Med Chi Public Relations Committee chairperson, served as host. On Saturday evening, Dr. Kawaguchi attended the AMA international dinner at the Ritz Carlton Hotel.

During the visit, Dr. Kawaguchi presented Joseph Snyder, M.D., Med Chi president, with a cloisonné plate. Cloisonné is the tedious work of enamel known in Japan as *shippo*, meaning "seven heavenly treasures." Derived from the Sanscrit, *septratuna*, the treasures are gold, silver, emerald, agate, coral, crystal, and pearl. Cloisonné enamel is an exquisite art form, of which Japan is understandably proud. Dr. Kawaguchi's beautiful gift is on display in the CEO's office at the Med Chi Faculty Building.

Since 1980, Maryland has had a sister state relationship with the Kanagawa Prefecture in Japan. The prefecture sponsors visits of medical services study groups to various institutions in the United States to review medical systems, meet with physicians and other health care professionals, and promote goodwill within the medical community. In 1991, Med Chi hosted a delegation of Japanese physicians and dentists that was led by Dr. Kawaguchi. At that time, Med Chi signed an agreement for cooperation, friendship, and exchange. A commemorative collage detailing the Maryland-Japan sister state relationship is on display outside Osler Hall in the Med Chi Faculty Building. ■ *V.S.*



Figure 2. L to R: Joseph Snyder, M.D., Med Chi president; Hiroshi Nakazawa, M.D., chairperson, Public Relations Committee; and Ryohei Kawaguchi, M.D., president, Kanagawa Prefectual Medical Association, at the AMA annual meeting.

Russian medical personnel visit Med Chi



Figure 1. Dr. Hrehorovich accepts a gift on behalf of Med Chi from the Russian Delegation.

The Medical and Chirurgical Faculty of Maryland (Med Chi) enjoyed the pleasure of hosting the Medical Personnel Delegation from Russia on June 28, 1993. The delegation comprised 19 Russian citizens and included physicians, dentists, nurses, health administrators, and government officials.

The group received a tour of the Med Chi Faculty Building, and the function of each department within the medical society was described. Victor R. Hrehorovich, M.D., editor of the *Maryland Medical Journal* and chairperson of the Committee on Scientific Activity, served as host and led the Russian delegation in a discussion on health care delivery in the United States. Dr. Hrehorovich fielded questions on medical insurance, malpractice, and cost of health care services. Angus Everton, J.D., Med Chi legal counsel, gave a brief overview of the American legislative process and described the medical community's role.

As a gesture of goodwill and friendship, the Russian delegation presented Med Chi staff with handcrafted works of art. These items will be treasured. ■ *V.S.*



Figure 2. Russian Delegation gathers in Osler Hall during their visit to the Faculty building.

WELCOME!

The Medical and Chirurgical Faculty of Maryland welcomes the new members listed below. They join an organization with a 194-year history of dedicated service to improving the health and welfare of the people of Maryland. With the help and expertise of longtime members and the participation and input of new members, Med Chi can continue its proud tradition of ensuring quality health care.

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Fitzgerald, D. Reid
North Arundel Hospital
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King, Charles E., Jr.
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GYN; BC 030; SS 300

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IM

Auxiliary

Auxiliary officers: Goals and objectives



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301-299-5810



Parliamentarian
Helen Boyer (Mrs. M. McKendree)
Montgomery County
301-253-2122

Goals and objectives for 1993-1994

- ***Lobby for health care legislation.*** This year, more than ever, the auxiliary will keep members informed about upcoming legislation and will be prepared to mobilize members to lobby for legislation that the auxiliary, in conjunction with Med Chi, aims to influence. The auxiliary is committed to securing legislation that not only protects doctors, but provides the best possible health care for all.
- ***Aid in the fight against family violence.*** This year, the state auxiliary, with the help of the county auxiliaries, plans to develop and implement a pilot program in conjunction with the Maryland Network Against Domestic Violence. The aim of this program is to provide spouse-abuse literature in every hospital emergency room in Maryland.
- ***Increase breast cancer awareness.*** In addition to the many auxiliary efforts, the county auxiliaries are asked to make arrangements for the display of billboards promoting breast cancer awareness in their counties. The more people we can reach, the more lives we might save.
- ***Develop teen education programs.*** The county auxiliaries, with help from the state or national auxiliary, are encouraged to create a program aimed at teenagers. The program can reflect the interests of the county auxiliary or a need in the community.
- ***Increase membership.*** Each county auxiliary should make an effort to reactivate past members, refresh nonmembers, and recruit new members. It is also important that we keep in touch with current members and let them know we value their work—they are our best ambassadors.

American Medical Association
Physicians dedicated to the health of America

For Your Benefit

First lady asks for physician input to ensure meaningful reform

Hillary Rodham Clinton pushed all the right buttons at the AMA Annual Meeting -- a strong indication of the Association's success in influencing the outcome of the president's reform proposal.

"Her appearance is testimony to her understanding of the critical role physicians will play if system reform is to succeed," said AMA Executive Vice President James S. Todd, MD.

In a 50-minute speech to the AMA's House of Delegates, Mrs. Clinton asked the Association to continue its input into the White House workings on reforming the health system. In return, she promised relief from administrative hassles, limits on malpractice suits, and release of utilization review and "government second guessing of medical decisions."

Mrs. Clinton praised the Association for its extensive input into the reform process.

"I am deeply grateful on a personal level that members of the AMA leadership spent invaluable time coming to meeting after meeting, day after day, sharing their ideas, reacting to ideas at the White House," she said. "And of course, in the course of that, we learned we had many common goals and objectives."

These common interests were notably similar to those in Health Access America, the AMA's reform proposal. She promised universal coverage, a comprehensive benefits package, community rating and free choice.

"We will have not just choice for patients as to which plan they choose to join, but choice for physicians as which plan they choose to practice with, including the option of being part of more than one plan at the same time."

She sympathized with physicians over government bureaucracy, saying, "We have to simplify and eliminate the burden from regulation created under CLIA." She also said the plan will "offer a serious proposal to curb malpractice problems."

AMA Trustee Nancy W. Dickey, MD, summed up the first lady's speech by saying, "She held out a hand in partnership."

Once the president's plan is unveiled sometime within the next several months, Dr. Todd said the AMA will not take a position until it has an opportunity to see the specifics of the proposal.

The Association will conduct an all-physician mailing giving a detailed AMA analysis of the plan after it is released.

Prepared by the Department of Communications Services. For information, call 800 AMA-3211, ext. 4416.

Physicians: Time to take action

Physicians, as individuals and as a group, can play a key role in health system reform. Efforts of organized medicine will be tested as never before. Your medical society is the best place to start. It will already have plans to respond to the Clinton plan. Your society will identify key state and federal representatives. And it will provide information on political positions, voting records and office addresses. Here are some suggestions from the AMA:

• *Stay informed.* Shortly after the release of the Clinton plan, you will receive a comprehensive summary and analysis from the AMA. The summary will include the implications of the Clinton plan for your practice and your patients.

• *Know your elected officials.* Establish a relationship with your senators and representatives. Introduce yourself as a physician and a constituent. Write to them or fax your messages. Ask to meet to discuss health reform issues and what it means to your patients. To telephone senators and representatives in Washington, D.C., call (202) 224-3121. Ask for your senator or representative by name.

• *Get your message across.* Use your own words and experiences. Caring for people is what health system reform is all about.

AMA-led campaign opposes enterprise liability

The Clinton administration reportedly has backed away from its intention to propose enterprise liability, after an AMA-led campaign advised that the profession would not consider it an "acceptable alternative" to real tort reform.

The AMA joined with specialty and state medical societies to shift the debate back to serious tort reform.

"We are pleased that the administration is reportedly considering reforms that include limits on awards for non-economic damages and attorneys' fees. Legal fees and administrative costs eat up 60 percent of patient compensation," said AMA Executive Vice President James S. Todd, MD.

Real tort reform fairly compensates injured patients, reduces costs, eliminates windfall judgments, and assures quality care. It also caps non-economic damages, limits lawyers' fees and staggers large awards.

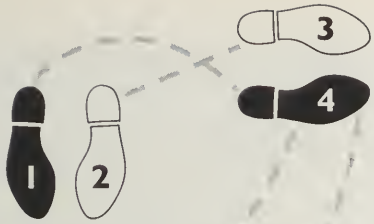
AMA success: IRS withdraws qualifying rules

IRS' withdrawal of potentially troubling proposed pension rules is a significant AMA regulatory victory; this comes as the result of AMA coalition lobbying and legal work done jointly with several national specialty societies during the past three years.

The proposal could have created enormous pension qualification problems for hospital-based physicians by requiring them to provide pension plans for hospital staff under their clinical supervision.

IRS' action means that hospital-based physicians who clinically supervise hospital staff cannot be fined for not providing pension arrangements, nor must they dismantle their existing pension plans.

Prepared by the Department of Communications Services. For information, call 800 AMA-3211, ext. 4416.



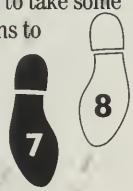
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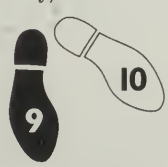


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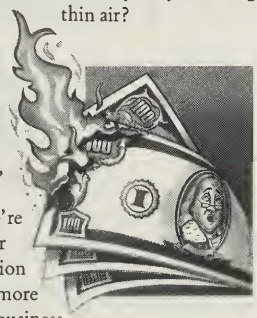


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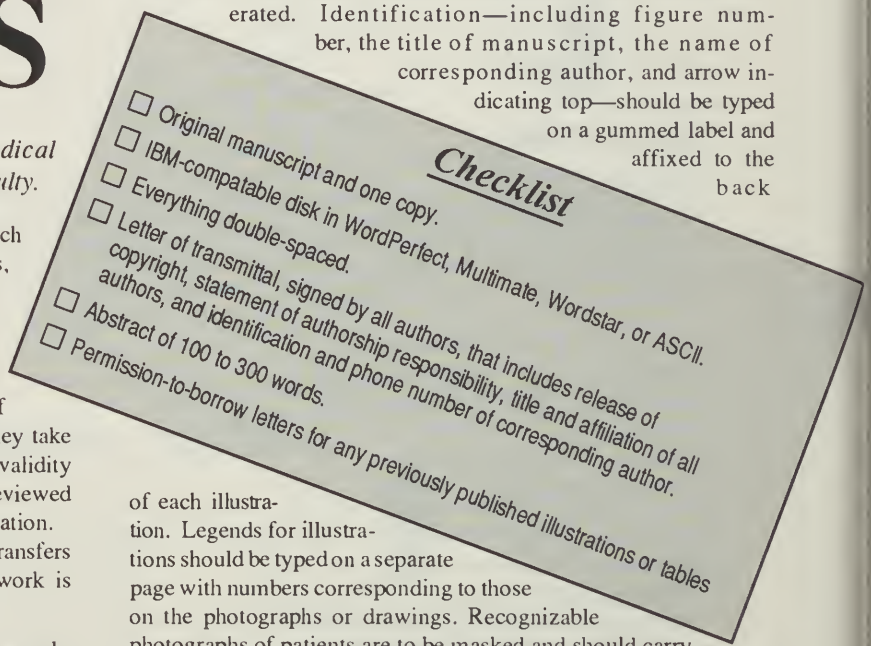
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  1. Stevens MB. The clinical spectrum of SLE. Md Med J 1991; 10:875–85.
  2. Ropes MW. Characteristics, manifestations, and pathologic findings. In: Ropes MD, ed. Systemic Lupus Erythematosus. Cambridge, MA: Harvard University Press. 1976; 50–4.

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2nd annual update on obstetric anesthesia plus an optional fiberoptic airway management workshop, at the Hyatt Regency Inner Harbor, Baltimore, Maryland. 12 Cat 1 AMA/PRA credits. Fee: $275 physicians; $175 CRNAs; $75 residents and fellows. **Aug. 21–22**

Pediatrics for the practitioner—Update 1993. Cat 1 AMA/PRA credits available. Fee: TBA. **Sept. 9–10**

7th annual core content of emergency medicine: A comprehensive review, at the Marriott Hotel, Baltimore-Washington International Airport, Baltimore, Maryland. Cat 1 AMA/PRA credits available. Fee $995. **Sept. 10–16**

22nd annual diagnostic ultrasound in gynecology and obstetrics and abdomen, at the Stouffer Harborplace Hotel, Baltimore, Maryland. 16.5 Cat 1 AMA/PRA credits. Fee: physicians: 3 days, $400; 2 days, $300; 1 day, $150. **Sept. 17–19**

Rising to the challenge: Crisis intervention in the critical care setting. Cat 1 AMA/PRA credits available. Fee: $75. **Oct. 4**

19th annual topics in gastroenterology and liver disease. Cat 1 AMA/PRA credits available. Fee $495 physicians; $250 residents and fellows. **Oct. 6–8**

35th annual Emil Novak memorial course. 45 AMA/PRA credits; 53 ACOG cognates. Fee: $675 physicians; $475 residents, fellows, and allied health professionals. **Oct. 18–23**

Diabetic retinopathy. 8 Cat 1 AMA/PRA credits. Fee: $200 physicians; $100 residents, fellows, and allied health professionals. **Oct. 29**

Practical management of the uveitis patient. 8 Cat 1 AMA/PRA credits. Fee: $200 physicians; $100 residents, fellows, and allied health professionals. **Oct. 30**

Ethics and politics related to clinical trials. Cat 1 AMA/PRA credits available. **Nov. 3–4**

Progress in pediatrics. 11 Cat 1 AMA/PRA credits. Fee: $140 physicians; $80 residents and fellows. **Nov. 5–6**

Update on sinusitis. Cat 1 AMA/PRA credits available. **Nov. 8**

Continuously throughout the year

Visiting preceptorship in pediatric critical care medicine. Ongoing five-day preceptorship by appointment. 40 Cat 1 AMA/PRA credits. Fee: $600.

The department of radiology and radiological sciences offers several courses in abdominal and obstetrical ultrasound. Info: P. Williams, 410-955-3169.

Visiting physicians. Offered throughout the year for experience in the lab and participation in read-in sessions; by appointment only. 40 Cat 1 AMA/PRA credits. Fee: $500.

Johns Hopkins medical grand rounds. Accredited audiovisual continuing education series of case discussions for clinicians; 30 topics per year in five bimonthly programs. Individual and group subscriptions. 40 Cat 1 AMA/PRA credits. Info: 410-955-3988.

University of Maryland

For each course, additional information may be obtained by contacting the Program of Continuing Education, University of Maryland School of Medicine, Room 14-011, BRB, 655 W. Baltimore St., Baltimore, Maryland 21201 (410-328-3956) or by calling the phone number listed after a specific program. FAX 410-328-3103.

Cardiovascular risk factors in the elderly: Medical and pharmacologic management, at the Baltimore Grand, Baltimore, Maryland. 7 Cat 1 AMA/PRA credits. Fee: $60 physicians. Info: Reba Cornman, 410-706-4327. — **Oct. 5**

Miscellaneous meetings

Imaging the augmented breast, sponsored by the Baltimore City Medical Society. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. — **Sept. 2**

1993 Med Chi semiannual meeting, at the Sheraton Ocean City Resort and Conference Center, Ocean City, Maryland. Info: Vivian Smith, 410-539-0872 or 800-492-1056. Fee: Free for Med Chi members. — **Sept. 10–12**

The decade of the brain: An international conference, sponsored by the George Washington University, at the Omni-Shoreham, Washington, DC. 28 Cat 1 AMA/PRA credits. Fee: $550 physicians; $330 residents and fellows; $250 other health professionals. Info: John F. Vargo, 202-994-4285. — **Sept. 11–14**

5th annual trauma conference, sponsored by the Peninsula Regional Medical Center, at the Sheraton Ocean City Resort and Conference Center, Ocean City, MD. Info: Darlene Kwiatkowski, 410-543-7328. — **Sept. 16–17**

14th international congress of lymphology, sponsored by the International Society of Lymphology (ISL). Part 1: "Frontiers in Lymphology" at the Hyatt Regency, Baltimore, Maryland. Part 2: "Lymphology in 1993" at the Ramada Renaissance Techworld, Washington, DC. Info: Grace Wagner, Program Coordinator, 602-626-6118. — **Sept. 20–26**

Congenital heart disease in adolescents and adults, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. — **Sept. 27–29**

Interventional echocardiography: Transesophageal, exercise, pharmacologic, and intravascular, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. — **Sept. 30–Oct. 2**

International liver symposium, sponsored by the George Washington University, at the Marriott Crystal Gateway Hotel, Arlington, Virginia. 14 Cat 1 AMA/PRA credits. Fee: $350. Info: Hattie Johnson, 202-687-8735. — **Oct. 1–3**

Clinical cardiac electrophysiology, pacemakers, and cardioverter-defibrillators, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. — **Oct. 4–7**

Causes of the medical malpractice crisis, sponsored by the Baltimore City Medical Society. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. — **Oct. 7**

Gastroenterology board review course, sponsored by the George Washington University, at the Marriott Crystal Gateway Hotel, Arlington, Virginia. 42 Cat 1 AMA/PRA credits. Fee: $650 physicians; $500 residents and fellows. Info: Daniel E. Reichard, 202-994-4285. — **Oct. 9–13**

Miscellaneous meetings (continued)

Medical oncology board review course, sponsored by the George Washington University, at the Ritz-Carlton, Pentagon City, Virginia. 38 Cat 1 AMA/PRA credits. Fee: $695 physicians; $500 residents and fellows. Info: John F. Vargo, 202-994-4285. **Oct. 9–13**

Clinical applications of doppler and transesophageal echocardiography, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. **Oct. 14–16**

New techniques and concepts in cardiology, sponsored by the American College of Cardiology, at the Hyatt Regency Hotel, Washington, DC. 16 Cat 1 AMA/PRA credits. Info: 1-800-257-4739. **Oct. 21–23**

Nuclear cardiology: A case study approach, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. **Oct. 21–23**

Cancer in women conference, at the Greater Baltimore Medical Center (GBMC), Baltimore, Maryland. Info: Celeste Morrissey, 410-828-3670. **Oct. 21 & 28 and Nov. 4 & 11**

Vascular radiology conference, at the Greater Baltimore Medical Center (GBMC), Baltimore, Maryland. Info: Celeste Morrissey, 410-828-3670. **Oct. 23**

7th annual national disability management conference and exhibit, sponsored by the Washington Business Group on Health, at the Crystal Gateway Marriott, Arlington, Virginia. Info: Kristina Tanasichuk, 202-408-9320. **Oct. 25–26**

Topics in clinical rheumatology: An arthritis update for internists, family practitioners, orthopaedists, rheumatologists, other primary care practitioners and allied health professionals, sponsored by the Arthritis Foundation, Maryland Chapter, at the Stouffer Harborplace Hotel, Baltimore, Maryland. Cat 1 AMA/PRA credits available. Fee: $50. Info: J. Karen Krug, 410-602-0160. **Oct. 28**

Cases in echocardiography: TEE, Doppler and stress—Interpretation and clinical decision making for the advanced echocardiographer, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. **Oct. 28–30**

Cardiology in women, at the Greater Baltimore Medical Center (GBMC), Baltimore, Maryland. Info: Celeste Morrissey, 410-828-3670. **Oct. 29**

The future of integrated healthcare systems conference, sponsored by The Healthcare Forum and Inova Health System, and in part by a grant from KPMG Peat Marwick, at the Hyatt Regency, Reston, Virginia. 13.25 Cat 1 AMA/PRA credits. Info: 415-421-8810. **Nov. 8–11**

Cardiac auscultation for physician assistants, nurse practitioners, and cardiac nurses, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. **Dec. 1–3**

Advanced echocardiography: Case studies and concepts, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. **Dec. 13–15**

Continuously throughout the year

Fluorescein angiography conference, sponsored by the Retina Center, St. Joseph Hospital, Baltimore, Maryland, first and third Mondays of each month; 8:00-9:00 am. Fee: none. Info: R. Classon, 410-337-4500.

Shady Grove Adventist Hospital

9901 Medical Center Drive, Rockville, Maryland. Info: 301-279-6115.

Various treatment perspectives for the anxious patient	**Aug. 5**
Treatment of nosocomial pneumonia	**Aug. 12**
New vascular interventional techniques and spiral CT scanning	**Aug. 19**
Tumor conference	**Aug. 26**

Managed Eye Care: Paradigms and Pathways

Allan D. Jensen, M.D., secretary for federal affairs of the Board of Trustees of the American Academy of Ophthalmology, brings to Med Chi members' attention a national invitational conference for physicians and practice administrators which details the history and success of Managed Eye Care (MEC) of Maryland—**"Managed Eye Care: Paradigms and Pathways."** MEC currently manages total eye care for more than 250,000 people in Maryland, Virginia, and Washington, DC.

The conference, sponsored by MEC Health Care, Inc. and *InSight Reports*, is a hands-on program for those who develop and manage all phases of this eye care network. It will be held October 23, 1993, in Baltimore. Watch these pages for more details.

PHYSICIAN'S RECOGNITION AWARD

During May 1993, the physicians listed below received the American Medical Association (AMA) Physician's Recognition Award. Established in 1968, the award's purpose is to encourage physician participation in continuing medical education and to recognize those physicians who have voluntarily completed programs of continuing medical education.

Jeffrey Alan Abend
Samuel Smith Blick
William A. Cassidy
Frank W. Davis
Robert Edgar Dinker
Beatriz Paulino Dizon
Regalado T. Dizon
Cristobal Gabriel Duarte
Randy S. Ellis
Hector Liwanag Feliciano
David Ryan Finger
Sylvan Frieman
Robert Wagner Gibson
Michael Cary Goodman
Martin William Graf
David Green
William Thomas Greer
Ira Gubemick
Robert Joseph Hedaya
Nelson Hendler
Diana Lee Hong
Steven Ray Jaskulsky
Peter Lawrence Klein
Bernard F. Kozlovsky
S. David Krimins
Edward I. Kushner
Richard Collison Lang
Harvey Nelson Mininberg
Gurbux H. Nachnani
James Meredith Noel
Laurence J. Pezor
Marc Stephen Posner
Ronald Joel Shumacher
John Thomas Stinson
Myron James Szczukowski
Jacob E. Teitelbaum
Lawrence Vidaver
Thomas Burkart Volatile
Joseph J. Wallace

William Donald Schaefer - Governor of Maryland

DHMH Maryland Department of Health & Mental Hygiene

Nelson J. Sabatini - Secretary
Department of Health & Mental Hygiene

J. Mehsen Joseph, PhD - Director
Community Health Surveillance & Laboratories Admin.

Ebenezer Israel, MD, MPH- Director
Epidemiology & Disease Control Program

EPIDEMIOLOGY & DISEASE CONTROL PROGRAM
201 W. Preston Street, Baltimore, Maryland 21201 (410)225-6700

July, 1993

Selected Communicable Diseases in Maryland in 1992

This summary describes the epidemiology of selected communicable diseases in Maryland in 1992. Only cases with onset of illness in 1992 were included. In addition to the routine physicians' reporting, an ongoing review of laboratory reports with investigation of patients whose test results showed evidence of a reportable disease added to the number of cases of amebiasis, gonococcal infection, Haemophilus influenzae disease, viral hepatitis, legionellosis, Lyme disease, malaria, meningococcal disease, nontuberculous mycobacteriosis, Rocky Mountain spotted fever, salmonellosis, shigellosis, and syphilis. Death certificates from the Department of Health and Mental Hygiene Center for Health Statistics that listed a communicable disease as a cause of death were counted if confirmed by investigation.

In the following report, the number in parenthesis after the name in the title of each disease indicates the number of cases in Maryland in 1992. Below the disease name are the incidence rates in Maryland and in the United States. The rates in Maryland are based on the 1992 population projections (Maryland Office of Planning. Population Projections. Individual Years, 1980 - 1995. Age, Sex and Race. Report 5A - Total. June 1990). The incidence rates in the United States are based on the 1992 population projection, obtained from the U.S. Bureau of the Census, and the cumulative number of cases reported to the Morbidity and Mortality Weekly Report (MMWR) system in 1992 (CDC. MMWR 1993, Vol.41, Nos. 52 & 53).

We are grateful to the physicians, hospitals, and laboratories for reporting communicable diseases. We appreciate the cooperation of the communicable diseases coordinators in the local health departments and the hospital infection control practitioners for investigating many cases and collecting additional pertinent information.

BOTULISM, INFANT (1)

0.02/100,000 (U.S. 0.2/100,000)

Botulism was confirmed by culturing *Clostridium botulinum* and demonstrating type B toxin in the stool of a 24-day-old boy who had been fed infant formula. After hospitalization and treatment the patient fully recovered. The source of infection was not identified.

CHOLERA (3)

0.06/100,000 (U.S. 0.04/100,000)

One case of cholera occurred in May in Anne Arundel County in a person who had eaten fish in Peru shortly before leaving the country. Another case was reported in June in Prince George's County in a patient whose illness had started in El Salvador after consuming raw clams. Both cases were confirmed by culturing toxigenic *Vibrio cholerae,* serogroup O1, serotype Ogawa. The patients were not hospitalized and both recovered. A third case occurred in September in a 9-month-old boy from Canada who had mild diarrhea shortly before the trip to Charles County to visit relatives. Twenty-four hours after arrival he was hospitalized for gastroenteritis with profuse watery diarrhea and dehydration. The patient was treated and discharged 4 days later. *V.*

cholerae, serogroup O1, serotype Ogawa, was isolated from the stool. The isolate was toxin-positive by polymerase chain reaction. During the investigation for the source of infection it was disclosed that the patient's father was working in an enteric microbiology laboratory; he had been vaccinated against cholera and denied any recent handling of *V. cholerae* bacteria. Additionally, the host family had just returned from Pakistan, where all 5 members (2 adults and 3 children) had diarrhea. However, serological testing for vibrocidal and antitoxin antibodies showed that one person had a slightly positive Inaba titer, 2 had positive titers which could not be distinguished from antibodies to E. coli heat labile enterotoxin, and 2 had negative antibody results.

ENCEPHALITIS, PRIMARY AND POSTINFECTIOUS (22)

0.5/100,000 (U.S. 0.3/100,000)

The incidence rate of 0.5 per 100,000 population in 1992 slightly decreased from 1991 (0.6/100,000). The number of cases by county is shown in Table 1. The highest rates per 100,000 population occurred in Talbot (3.4), Washington (1.7), St. Mary's (1.3), and Harford (1.1) counties. Almost half of the cases (45.5%) had onset of illness in September through December.

The male to female ratio was 1.2:1.0; the ratio of whites to blacks was 2.3:1.0, one case was Asian, and the race of one case was unknown. The age of the patients ranged from 15 days through 78 years (median 30.5 years). Seven cases (31.8%) were less than 14 years of age.

Herpes viruses (9 cases, including 3 post-varicella and 1 post-herpes zoster), *Toxoplasma gondii* (1), *Cryptococcus neoformans* (1), and an untyped enterovirus caused or were suspected to have caused 12 of the cases; the cause for the rest was not identified. Five patients died for a case fatality rate of 22.7%, a threefold increase from 1991 (7.4%). No arboviral encephalitis was reported in 1992; the last eastern equine encephalitis in Maryland occurred in 1989.

GONOCOCCAL INFECTIONS (16,513)

341.0/100,000 (U.S. 195.3/100,000)

Reported gonococcal infections decreased by 24% from the number in 1991 (21,646). The cases by jurisdiction are shown in Table 1. Baltimore City noted a 14% decrease from 1991, but still reported 63.7% of all cases and had the highest rate per 100,000 population (1482.4) in the State. The rate in the counties (excluding Baltimore City) decreased by 37%. Counties with high rates were Wicomico (553.3), Dorchester (458.0), Prince George's (364.2), and Somerset (340.6). The trend of gonorrhea in Maryland and in the United States during the past decade is shown in Figure 1.

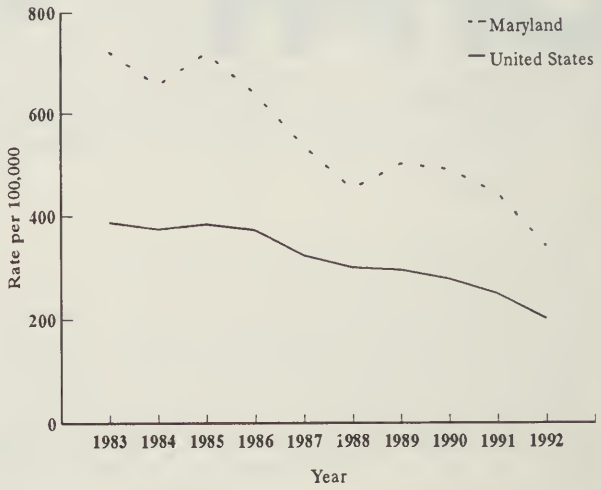


Fig 1. Gonococcal Infection. Incidence Rates in Maryland and the United States, 1983-1992.

The age distribution of the cases was similar to that in 1991 with 82% of cases 15 to 34 years of age. The rates per 100,000 population by age group and sex are shown in Figure 2. In 1992, among the 11,137 cases for whom race was reported, 96% of males and 91% of females with gonorrhea were black.

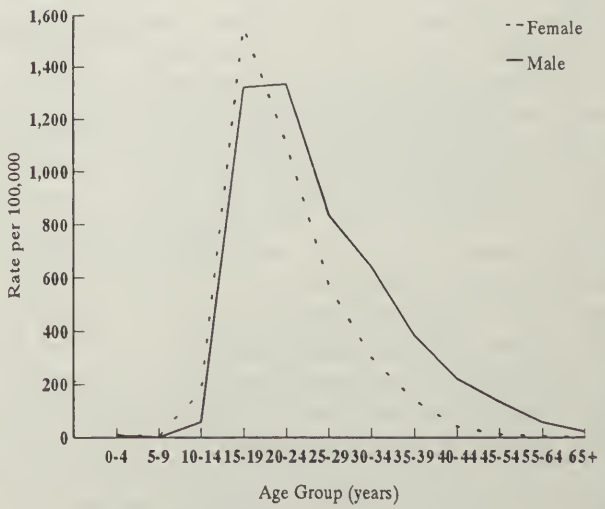


Fig 2. Gonococcal Infection. Incidence Rates by Age Group and Sex, Maryland, 1992.

To be continued August, 1993.

Table 1. Reported Cases of Notifiable Diseases in Maryland by County with Onset Date in 1992

Maryland Department of Health and Mental Hygiene

Jurisdiction	Population	Infectious Parotitis (Mumps)	Pertussis	Rubella (German Measles)	Rubeola (Measles)	Hepatitis A	Hepatitis B	Hepatitis NANB	Hepatitis, Unspecified	Encephalitis	Haemophilus influenzae Disease	Meningococcal Disease	Meningitis, Bacterial	Meningitis, Viral	Salmonellosis	Typhoid Fever	Shigellosis	AIDS	Gonorrhea	Syphilis, Primary and Secondary	Syphilis, Congenital	Tuberculosis	Lyme Disease	Rocky Mountain Spotted Fever	Animal Bites	Rabies, Animal
Allegany	75,461					5	2				1		1	2	7			1	12	2		5			232	12
Anne Arundel	435,722	12	9			27	19	1		1	6	6	10	6	69		26	38	400	44	1	18	8		1,270	15
Baltimore City	737,923	11	12		1	89	140	7	1	3	31	3	51	20	233		166	686	10,939	188	26	127	10	1	1,592	10
Baltimore Co.	702,853	13	5	1	2	51	62	10	3	4	10	2	28	44	93		55	71	517	4		38	35	5	636	31
Calvert	54,986	1	1				1				1	1		2	6		1	7	39	3		5	6		187	6
Caroline	27,714					1	3							3	8			2	37			2	16		89	40
Carroll	131,324	1				3	5			1	2	1	4	3	32		5	7	19	1		3	2		295	16
Cecil	81,177						1	1	1			1		3	9			5	34			2	11		489	15
Charles	106,458	2				1	7					1	4	1	19			8	167	4	1	2	11	3	396	11
Dorchester	30,783		1			1	5						3		9		4	6	141	17	1	3	4		204	55
Frederick	158,231	3	7	2		3	9	3				1	1	9	22		7	5	116	2		5			447	79
Garrett	28,567						2							1	4			1	3			1			107	10
Harford	186,234	5				8	12	2	1	2	1	1	6	8	32		13	16	87			6	13		563	24
Howard	192,450	4	2		1	8	6	1	1		3	1		6	60	1	15	11	84	3		7	3	1	360	14
Kent	17,224												1	1	1			1	4			2	14		1	2
Montgomery	744,168	8	12		7	36	24	1	1	4	9	5	17	53	168	4	48	94	426	25	4	95	6	2	1,295	31
Prince George's	730,376	19	3		6	9	66	1	1	3	13	5	27	49	138	4	82	245	2,660	182	27	88	8	3	1,147	26
Queen Anne's	34,931						2						3	1	8		3	5	32				17		136	31
Saint Mary's	75,946	3				1	3			1	1	1	1	3	18			7	69	9		2	6		182	2
Somerset	23,196						3				2				9		2	1	79	8		4	4		97	
Talbot	29,581					2		1		1		1	1	1	5		1	3	57	6		2	5	1	175	63
Washington	121,391			2		6	9			2	1		3	5	20			9	78	1		7			225	27
Wicomico	76,453	2				2	3	1				1	3	1	39		1	10	423	73	2	11	2		440	33
Worcester	39,612					1	4	2					1	1	11		1	2	90	18		7	4		111	
Not Stated															1			32								
Maryland Total	4,842,761	84	52	5	17	254	388	31	9	22	81	31	165	223	1,021	9	430	1,273	16,513	590	62	442	185	16	10,676	553
Maryland Totals for Prior Years	1991	236	61	1	178	258	387	45	20	27	40	35	166	333	1,262	8	258	841	21,646	1,016	54	451	283	22	9,927	579
	1990	1,136	90	3	204	866	545	45	13	27	57	45	141	266	1,251	33	249	788	23,446	1,136	81	384	238	20	9,690	468
	1989	625	96	2	122	1,200	668	28	20	23	73	78	157	246	1,495	12	276	676	23,194	799	19	404	138	19	9,434	389
	1988	204	43	1	19	307	691	49	47	18	122	57	167	213	1,617	6	736	524	20,733	688	7	466	55	26	9,413	338

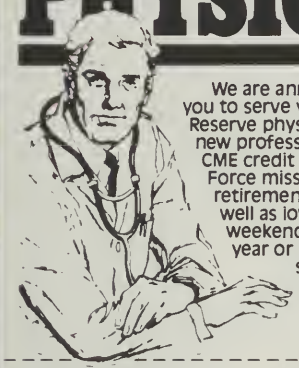
Continues

Table 1. Reported Cases of Notifiable Diseases in Maryland by County with Onset Date in 1992 Continued

DHMH
Maryland Department of Health and Mental Hygiene

Jurisdiction	Population	Amebiasis	Anthrax	Botulism	Brucellosis	Campylobacteriosis	Cholera	Giardiasis	Kawasaki Syndrome	Legionellosis	Leprosy	Leptospirosis	Listeriosis	Malaria	Mycobacteriosis, Atypical	Newborn Infection	Plague	Poliomyelitis	Psittacosis	S. typhi Carrier	Tetanus	Trichinosis	Tularemia	Typhus, Murine	Vibrio (Non-01) Infection	Yersiniosis
Allegany	75,461					2								1	1											1
Anne Arundel	435,722	1				19	1	11	1	2			4	1	35	4			1							6
Baltimore City	737,923	2		1		61		11	1	6			8	4	228	29									3	10
Baltimore Co.	702,853	1				3		1		8			3	6	56	36									1	1
Calvert	54,986							4		1					6											
Caroline	27,714					2									2											1
Carroll	131,324					8		2	2	2					6	2						1				1
Cecil	81,177					6		2		1					4											
Charles	106,458					1									3	2			1							
Dorchester	30,783														5											2
Frederick	158,231					5		5	1	1					8	4						2				
Garrett	28,567							1		1																
Harford	186,234	3				1		2		4				1	6	18										
Howard	192,450					7		5	1				1		7	2										
Kent	17,224								1	1					1											
Montgomery	744,168	2				9		7	12	2			3	20	74	20								1		
Prince George's	730,376					11	1	2	6	5			5	28	96	14				3					1	1
Queen Anne's	34,931							1		1					2											
Saint Mary's	75,946							7							3											
Somerset	23,196					2									4	1				1						
Talbot	29,581					1		1							4											
Washington	121,391					3		2	1	3					5	2										
Wicomico	76,453	1				2		3		1			1		18	2										
Worcester	39,612					7		2							3											
Not Stated																										
Maryland Total	4,842,761	10		1		150	2	69	26	39			25	61	577	136			2	4		3		1	5	23
Maryland Totals	1991	9				119	4	90	17	34	5		2	62	507	84		1	5	2	1		2		2	28
for	1990	8		7		128		58	17	48	1	1	5	57	473	30	1		2	1					6	39
Prior Years	1989	9		1		279		89	20	35		1	7	42	314	158		1	2	1	1		2			34
	1988	16		2	2		1	112	15	30	2		1	27	466	206			2		1		3	1	15	52

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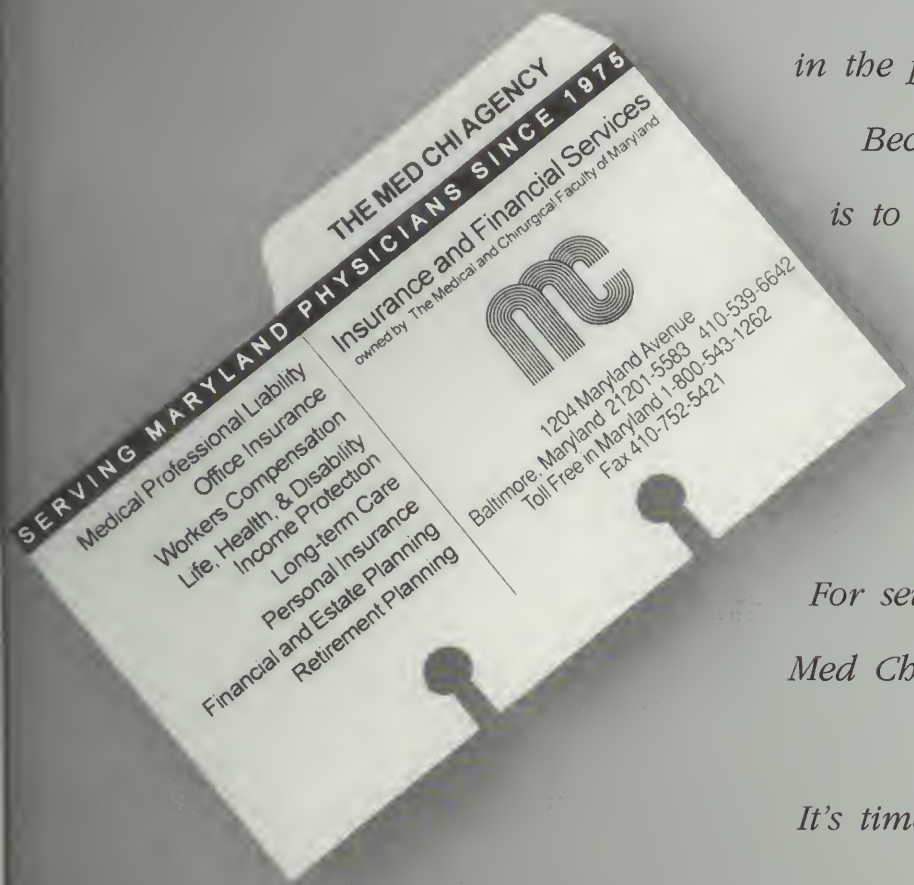
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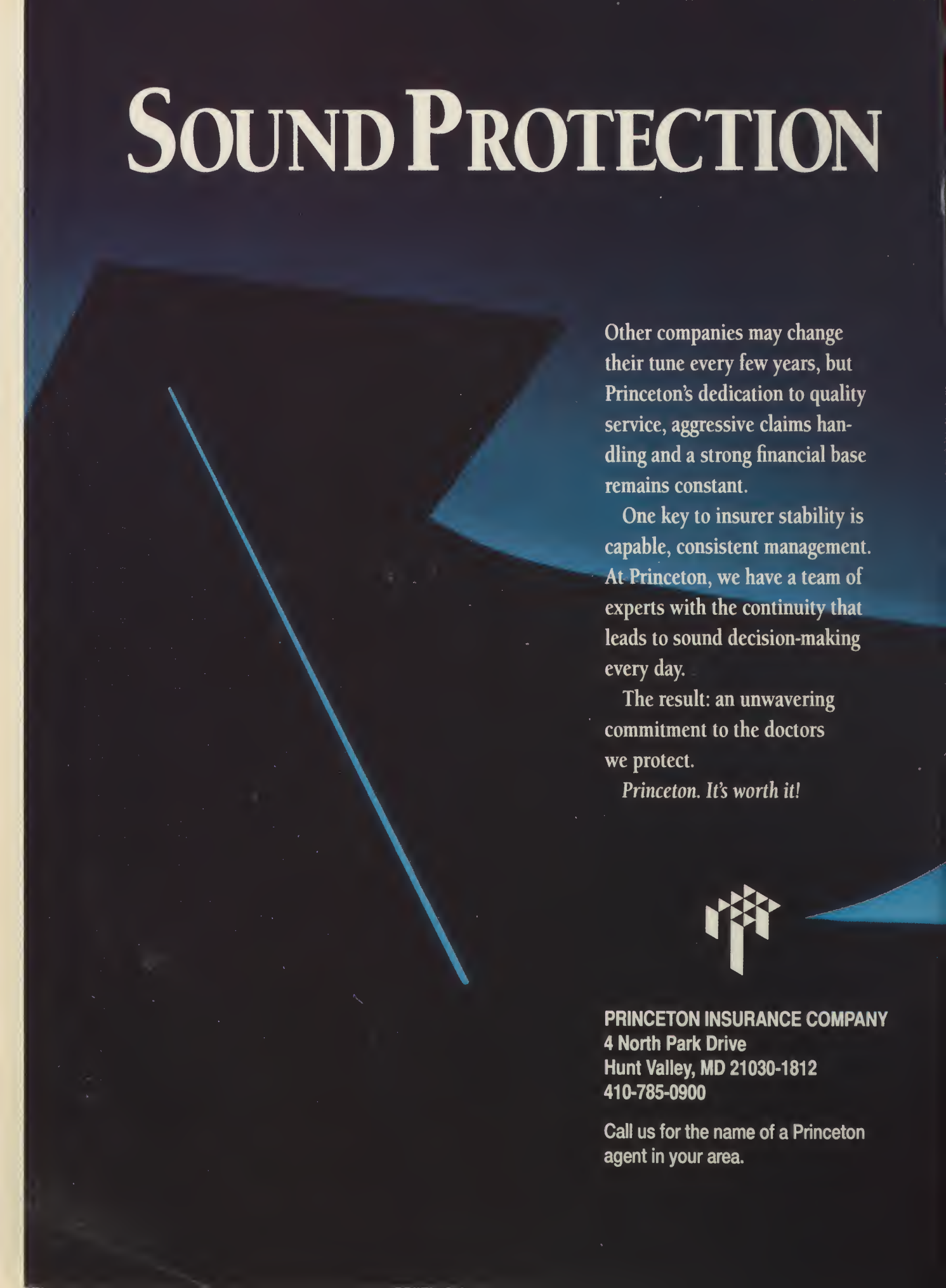


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Cover design: Virginia Carter

On the cover: The commissioning and outfitting of the U.S.S. Constellation, which now floats in Baltimore's Inner Harbor, was delayed in 1797 due to a yellow fever epidemic. The yellow flag, commonly known as the "yellow jack," signified—when flown alone—that a ship had no disease on board and was requesting a pratique. Flown with another flag, the yellow jack indicated disease on board the ship. In years past, the yellow jack was often flown on Baltimore buildings to indicate quarantine.

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Tax-free fund	$922	–	$0	=	**$922**
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Taxable fund	$904	–	$336	=	**$568**
Tax-free fund	$620	–	$0	=	**$620**

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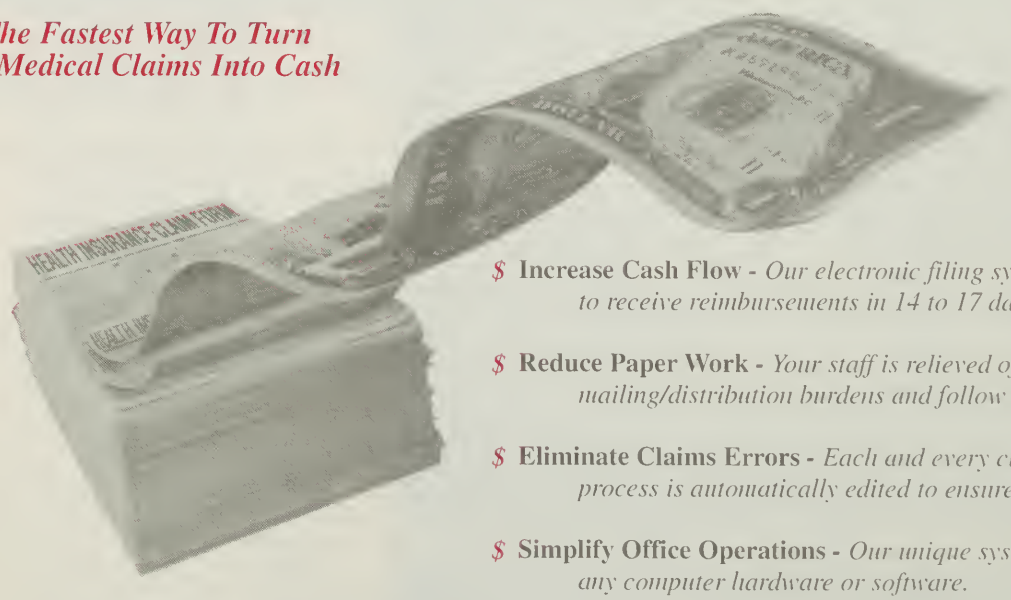
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Chief Executive Officer's Newsletter

August 1993

Med Chi Sponsors Press Conference on Statewide Substance Abuse Education Program

On August 4, 1993, Med Chi, in conjunction with the Governor's Drug and Alcohol Abuse Commission, held a press conference to announce the initiation of a statewide substance abuse education program. The program has already been presented by Med Chi to over 500 physicians practicing in Baltimore City. It is designed to help physicians identify, treat, and refer patients with substance abuse problems. Statewide courses will begin this fall.

The following media covered the story:

Television

- WJZ-TV (Channel 13)
- WBAL-TV (Channel 11)
- WMAR-TV (Channel 2)

Radio

- WPOC-FM, Baltimore
- WBAL-AM, Baltimore
- WCBM-AM, Owings Mills

Newspaper

- *Arundel Sun*, Anne Arundel County
- *Carroll Sun*, Carroll County
- *Prince George's Journal*, Lanham
- *Baltimore Sun*, Baltimore
- *Evening Sun*, Baltimore
- *Howard Sun*, Howard County

Unique Physician Identification Number

The following services require unique physician identification numbers (UPIN):

- diagnostic laboratory services
- diagnostic radiology services
- consultative services
- specific durable medical equipment
- audiologist services
- physical therapy
- occupational therapy
- surgery

For these services, the name of the ordering/referring physician must be documented in item 17, and the UPIN must be shown in item 17a of the HCFA 1500 form.

Medicare Medical Policies on Critical Care and on Monitored Anesthesia Care

The finalized Medicare medical policy on critical care in Maryland and on monitored anesthesia care (MAC) follow this *Chief Executive Officer's Newsletter*. The latter policy was developed in cooperation with the Maryland Society of Anesthesiologists and is based on standards established by the American Society of Anesthesiologists. Please review these policies and detach them for your records.

Flood Relief

Financial donations are needed to assist Iowans who have been forced out of their homes. The following organizations are accepting donations:

Iowa Cares	American Red Cross	Salvation Army
666 Walnut	2116 Grand Avenue	1330 6th Avenue
Des Moines, IA 50309	Des Moines, IA 50312	Des Moines, IA 50304
	Attn: Brother Phillip	Attn: Lt. Hellstrom

It has been estimated that one-third of Iowa's corn and bean crops are gone, and hundreds of people have lost everything including their homes. There has been damage to bridges, roads, and sewer systems. Business losses in the city of Des Moines alone could exceed $700 million.

Warner-Lambert Reaches Agreement with the Food and Drug Administration

Warner-Lambert (Parke-Davis and Parke-Davis Consumer Health Products Group) has been working with the Food and Drug Administration (FDA) to resolve issues about its manufacturing operations. The company recently reached an agreement with the FDA in the form of a consent decree. This decree ensures compliance with good manufacturing practices (GMP). The agreement calls for certification of all Warner-Lambert drug products. No interruptions in the supply of over-the-counter products is expected; however, spot shortages could occur. There may be interruptions in supply and distribution of certain Parke-Davis prescription products and, in a few cases, discontinuation.

The safety and efficacy of the company's products are not at issue, and the decree does not require any product recalls. Warner-Lambert has realigned its manufacturing and quality assurance operations and committed human and capital resources to achieving compliance with GMPs. If you have questions, please call the Warner-Lambert Information Service at 1-800-926-1151.

Risk Management Program

As of August 1993, the Medical Mutual Liability Insurance Society of Maryland (Med Mutual) has presented more than 62 risk management seminars, "Medicine on Trial." In excess of 3,000 physicians have participated in these programs and will receive a 5% premium discount on their 1994 Med Mutual individual renewal policy premium. To take advantage of this opportunity, attend one of the following seminars designated for 2 credit hours in Category 1 of the Physician's Recognition Award.

August 17	Colony South Hotel, Clinton
August 19	Med Chi, Baltimore
August 24	Kent/Queen Anne's Hospital, Chestertown
August 31	Shady Grove Adventist Hospital, Rockville
September 1	Medical Mutual, Hunt Valley
September 2	Patuxent Medical Group, Columbia
September 7	Cambridge Yacht Club, Cambridge
September 8	Medical Mutual, Hunt Valley
September 9	Anne Arundel Medical Center, Annapolis
***September 11**	**Sheraton Ocean City Resort, Med Chi Semiannual Meeting, Ocean City**
September 14	Harford Memorial Hospital, Havre de Grace
September 15	Doctors Community Hospital, Lanham
September 16	Medical Mutual, Hunt Valley
September 21	Holy Cross Hospital, Silver Spring
September 22	Medical Mutual, Hunt Valley
September 23	Frederick Memorial, Frederick

Cost is $40.00. Space is limited, and reservations are accepted on a first-come, first-served basis. To register, call the Risk Management Services Department at 410-785-0050 or 1-800-492-0193.

Angelo J. Troisi, F.A.C.H.E.
Chief Executive Officer

Medical Policy

SUBJECT: **Critical Care**

EFFECTIVE DATE: **7/9/93**

CPT/HCPCS Code(s): **99291, 99292**

Description of Service: Critical care includes the care and monitoring of critically ill patients in a variety of medical emergencies that require the constant attention of the physician (e.g., cardiac arrest, shock, bleeding, respiratory failure, post-operative complications).

PLACE OF SERVICE AND APPLICABILITY OF CRITICAL CARE CODES

- Critical care is usually but not always given in a critical care area such as the coronary care, intensive care, or respiratory care units or the emergency department. However, payment may be made for critical care services provided in any location.

- **Payment may be made under the critical care codes only if the physician is providing constant attention to a critically ill patient (e.g., cardiac arrest, massive bleeding). Services provided in a CCU or ICU which do not meet this requirement are not to be billed under the critical care codes. Hospital care codes rather, should be used to report these services.**

Clinical Indications: PROCEDURES AND CRITICAL CARE SERVICES:

Critical care is considered to be an evaluation and management service and several procedures are included in this service. The following codes are bundled into Critical Care Codes 99291 and 99292 and may not be paid separately

when they are provided on the same day by the same physician as the Critical Care Codes:

36000	Introduction of needle or intracatheter, vein
36410	Venipuncture, adult, necessitating physician's skill; diagnostic or therapeutic purposes; not routine
36415	Routine venipuncture for specimen collection
36600	Arterial puncture, withdrawal of blood for diagnosis
71010	Radiologic exam, chest; single view, frontal
71020	Radiological exam, chest; two views, frontal and lateral
91055	Gastric intubation
92953	Temporary transcutaneous pacing (external)
93561	Indicator dilution studies; with cardiac output measurement
93562	Indicator dilution studies; subsequent measurement cardiac output
94656	Ventilator assistance and management; first day
94657	Ventilator assistance and management; subsequent days
94760	Non-invasive ear or pulse oximetry for oxygen saturation; single determination
94761	Non-invasive ear or pulse oximetry for oxygen saturation; multiple determinations
94762	Non-invasive ear or pulse oximetry for oxygen saturation; continuous overnight monitoring

All other procedure codes can be paid for separately and will not be bundled into the Critical Care Codes.

ECG interpretations (CPT 93000, 93010, 93040 and 93042) will not be paid separately when performed as part of or in conjunction with Critical Care, as with any other visit or consultation.

CRITICAL CARE SERVICES IN GENERAL AND IN TRAUMA AND BURN CASES:

- Under the global surgery policy, a single fee is paid for all necessary services normally furnished by the surgeon before, during and after the procedure. This generally includes critical care services which are considered related to the surgery and cannot be separately billed.

- Critical care services provided during a global period for seriously injured or burned patients are not considered to be related to a surgical procedure and may be paid separately under the following circumstances:

    1. Pre-operative critical care may be paid in addition to a global fee if:

        a. the patient is critically ill and requires the constant attendance of the physician and

        b. the critical care is unrelated to the specific anatomic injury or general surgical procedure performed. Such patients are potentially unstable or have conditions that could pose a significant threat to life or risk of prolonged impairment. (Examples - a trauma or burn diagnosis must be submitted along with at least one of the following diagnoses which require critical care):

            - Acute myocardial infarction (410-410.9) associated with shock (785.51)
            - Cardio respiratory arrest (427.5)
            - Massive hemorrhage (specify site)
            - Acute respiratory failure (518.81)
            - Shock (several types, 785.5 - 785.59; anesthetic shock 995.4; anaphylactic shock, 995.0; post-operative shock, 998.0; traumatic shock, 958.4).

        In order for these services to be separately paid, two reporting requirements must be met. Codes 99291/99292 and modifier 25 ("significant, separately identifiable evaluation and management services by the same physician on the day of the procedure") must be used. Documentation that the critical care was unrelated to the specific anatomic injury or general surgical procedure performed must also be submitted (e.g., a copy of progress notes, the discharge note, an explanatory letter that constant care and attendance was needed along with one of the above listed critical care diagnoses). An ICD-9-CM code in the range 800.0 through 959.9 (except 930-939) which

clearly indicates that the critical care was unrelated to the surgery is acceptable documentation along with the critical care diagnoses listed above.

NOTE: The modifier 25 is intended for use with evaluation and management codes ONLY. DO NOT SUBMIT the modifier attached to surgical codes.

2. Post-operative Critical Care may be paid in addition to a global fee if:

   a. the patient is critically ill and requires the constant attendance of the physician and

   b. the critical care is unrelated to the specific anatomic injury or general surgical procedure performed. Such patients are potentially unstable or have conditions that could pose a significant threat to life or risk of prolonged impairment.

Billing Instructions:

Critical care code 99291 is used to report the first hour of critical care and the code 99292 is used to report each additional 30 minutes. The following represents guidance when these exact times are met.

Code 99291, Critical Care, first hour should be used to report the services of a physician providing constant attention to a critically ill patient for a total of 30 minutes to one hour on a given day. If the total duration of critical care provided by the physician on any given day is less than 30 minutes, the appropriate E/M code could be used. In the hospital setting, it is expected that the level 3 subsequent hospital care code (99233) would most often be used.

Code 99292, Critical Care, each additional 30 minutes, should be used to report the services of a physician providing constant attention to the critically ill patient for 15 to 30 minutes beyond the first hour of critical care on a given day.

- The following example will illustrate the correct reporting of critical care services to hospital inpatients:

Total Duration of Critical Care	Code(s)
a. less than 30 minutes	99232 or 99233
b. 30 - 40 minutes	99291 x 1
c. 75 - 90 minutes	99291 x 1 and 99292 x 1
d. 1 hr. 31 min.-2 hr. 14 min.	99291 x 1 and 99292 x 2
e. 2 hr. 15 min.-2 hr. 30 min.	99291 x 1 and 99292 x 3

COUNTING FULL TIME INTENSIVIST SERVICES

- Concurrent care services provided by the primary physician and the intensivist may be paid as long as there is a written request for the latter's services by the primary physician and the intensivist bills for a consultation or critical care, but not both, and the hospital record justifies payment to the primary physician by documenting that he or she contributed substantially to the patient's care.

CRITICAL CARE SERVICE LIMITATIONS

- There are no absolute limits on the number of critical care services that can be billed per day or per hospital stay.

- A physician, however, must be prepared to demonstrate that the service billed meets the definition of critical care.

- The carrier may request documentation for cases in which it is implausible that the amount of critical care billed was provided (e.g., more than a total of 12 hours of critical care billed by a physician for one or more patients on the same day).

- Only one physician may bill for a given hour of critical care even if more than one physician is providing care to a critically ill patient.

- Critical care services furnished by anesthesiologists (not CRNA's) are coverable.

- If critical care is required upon presentation to the emergency room only critical care codes (99291 - 99292) may be reported. Emergency department codes will not be paid for on the same day.

- If there is a hospital visit early in the day and at that time the patient does not require critical care, but the patient requires critical care later in the day, both critical care and a hospital visit may be paid.

- Documentation must be submitted when critical care is billed on the same day as other evaluation and management services.

Approved by: Barry S. Gold MD

Barry S. Gold, M.D., F.A.C.P
Medical Director

critical.car

Medical Policy

SUBJECT: **Monitored Anesthesia Care**

EFFECTIVE DATE: **Retroactive to May 1992**

CPT/HCPCS Code(s): Use the appropriate CPT-4 anesthesia code followed by the modifier -QS to indicate monitored anesthesia.

Description of Service: The American Society of Anesthesiologists (ASA) defines MAC as "instances in which an anesthesiologist has been called upon to provide specific anesthesia services to a particular patient undergoing a planned procedure, in connection with which a patient receives local anesthesia or, in some cases, no anesthesia at all. In such a case, the anesthesiologist is providing specific services to the patient and is in control of his or her non-surgical medical care, including the responsibility of monitoring his or her vital signs, and is available to administer anesthetics or provide other medical care as appropriate."

Monitored Anesthesia Services include:

- performance of the preanesthetic exam and evaluation,
- prescription of the anesthesia care required,
- personal participation in or medical direction of the entire plan of care,
- continuous presence of the anesthesiologist. In the case of medical direction, the resident or nurse anesthetist being medically directed are in continuous physical presence.
- proximate presence for diagnosis or treatment of emergencies.

- Services provided during the procedure include non-invasive cardiocirculatory and respiratory monitoring, oxygen administration when necessary, and oral and intravenous use of medications; and

- postoperative anesthesia care.

All institutional regulations pertaining to anesthesia services should be observed and all the usual services performed by the anesthesiologist should be furnished.

Clinical Indications:

For procedures which do not usually require anesthesia services, monitored anesthesia would be covered when the patient's condition medically requires the presence of an anesthesiologist or medically directed anesthetist to perform monitored anesthesia in addition to the physician performing the procedure.

1. This policy does not apply to the use of monitored anesthesia instead of general anesthesia.

2. It does apply to pacemaker insertion.

3. It does apply to cataract surgery.

4. Monitored anesthesia care is only covered when the patient's medical condition requires medical direction of the anesthesia to ensure control of the sedation, medication, airway and to prevent sudden changes in condition from disrupting the procedure and placing the patient at risk. Following is a list of such conditions/diagnoses that may require MAC:

   Active hallucinations
   Cardiomyopthy
   Cerebrovascular disease
   Combative patients
   Debridement of burns
   Dressing changes
   Hepatic failure
   Hypertension, unstable
   Hypotension
   Life threatening arrythmias such as ventricular tachycardia
   Morbid obesity

Organic brain syndrome/dementia with confusion or combative behavior
Painful procedures
Peripheral extremity blocks
Renal failure, acute or ESRD patient on a dialysis program
Seizure disorder
Severe anxiety
Severe respiratory disease, emphysema, bronchitis, cor pulmonale, asthma, pulmonary edema, unstable CHF
Tracheostomy
Unstable angina
Valvular heart disease

5. The MAC service rendered must be reasonable, appropriate and medically necessary. Flexibility will be encouraged in reviewing the clinical indications evaluated by the anesthetist in selecting MAC.

6. The following procedures are some but not exclusive examples of those that could qualify for Monitored Anesthesia Care:

00100	00830	01260
00120-00126	00832	01272
00140-00145	00842	01274
00160	00850	01300
00170	00857	01320
00212	00860	01340
00214	00870	01380
00220	00872	01382
00300	00884	01390
00322	00900	01420
00352	00902	01430
00400	00910	01440
00402	00912	01442
00410	00920	01460
00420	00942	01462
00520	00948	01464
00522	00950	01470
00530	00952	01490
00700	01000	01502
00702	01110	01520
00740	01130	01522
00800	01202	01600
00806	01220	01610
00810	01240	01620
00820	01250	01622

01650	01782	01906
01680	01800	01908
01682	01810	01910
01700	01820	01916
01710	01840	01918
01730	01844	01920
01732	01860	01921
01770	01900	01922
01772	01902	01990
01780	01904	

Billing Instructions:

1. Use the appropriate CPT anethesia code followed by modifier -QS to indicate monitored anesthesia.

2. Reimbursement for MAC will be the same amount allowed for full general anesthesia if all the requirements listed are met. Full reimbursement will be allowed for reasonable and medically necessary services rendered under these requirements which are enumerated under clinical indications. If the latter are not fulfilled, payment will be denied in full.

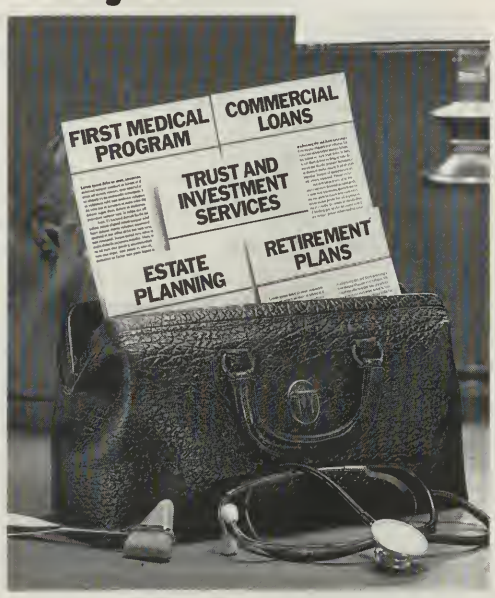
3. Criteria for medical direction of anesthetists and interns and residents apply to monitored anesthesia services.

4. The Carrier at his discretion may periodically sample anesthesia claims for necessity, appropriateness and adherence to MAC guidelines.

Approved by: Barry S. Gold M.D.
Barry S. Gold, M.D., F.A.C.P
Medical Director

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LETTERS TO THE EDITOR

Public health—the other health care system

Affordable health care is a priority issue and uppermost on people's minds these days, especially people who have lost their jobs or are working for companies that do not provide health insurance. Reform of the current system certainly will be debated. By devoting all of our efforts to reforming the current health care system, however, there is a danger that we will lose sight of what I will call the "other" or the "silent" health care system—public health departments. Although little known and often underappreciated, the public health departments in each county and at the state level provide preventive health services designed to promote and protect the public's health. With the state and local funding cuts over the past several years, the public health system—equally as important to the well-being of our communities—is threatened with extinction.

For many years, the public health departments have accomplished their mission quietly and without fanfare. Many of their services, therefore, have been taken for granted. Indeed, many Maryland citizens have little idea of the range of services offered by local health departments. Some consider them agencies that provide medical care only for the less fortunate members of our community—the so-called provider of last resort. Actually, health departments plan, develop, implement, and evaluate preventive health programs for all citizens.

Acute medical care services are not usually provided, but local health departments work to assure access to those services for the people in our communities who need them, regardless of their ability to pay. As those with limited resources are often members of the minority population, both groups receive special attention.

Let me detail just a few of the many programs that health departments provide. Preventing, diagnosing, treating, and controlling the spread of tuberculosis (TB), sexually transmitted diseases (STD), and acquired immunodeficiency syndrome (AIDS) are among the top priorities. These diseases are increasingly common today, especially among teenagers and women, but also in people newly arrived from other countries. Unfortunately, certain lifestyle choices also put people at risk for these infections. Community health education, which is what public health departments do very well, is the most important means of preventing these potentially life-threatening infections.

Prevention programs for women provide family planning, prenatal care, and well-child care, including health education and immunizations. Without these, infant mortality and teenage pregnancy rates would increase dramatically. When you eat in a restaurant or swim in a public swimming pool, your safety is protected by the public health departments' inspection programs. With the help of private doctors, hospitals, and state and national organizations, 20 reportable diseases are traced and treated by local health departments to prevent spread in the community.

Public health services are oriented to prevention rather than treatment. Priorities have been established in this way because the results have been proven to

save lives and scarce dollar resources. In this context, it is important to note that for every dollar spent on prevention, such as immunizations for children, $10 is saved on medical costs that would be associated with treatment of resulting diseases.[1] For every dollar spent on prenatal care, $3 is saved in prolonged hospitalization and care of sick infants.[1] Public health is cost-effective.

In these economic times, setting priorities as to which public health programs can continue is inevitable. At the same time, increasing numbers of county residents now depend on the health departments' clinical services because of lost jobs and worsening family finances.

We must advocate—health care providers and the public alike—as national health system reform becomes a reality, for public health programs. We could understand less funding if the public health needs of Maryland residents had decreased. They have not. I ask the reader, as a health care provider and a Maryland citizen, what would happen if there were not adequate resources to inspect restaurants; to check drinking water supplies; to provide immunizations to children and the elderly; to prevent the spread of communicable diseases such as TB, syphilis, and AIDS; to reduce transmission of rabies and Lyme disease; or to provide health promotion programs to reduce mortality from cancer, heart disease, and other controllable chronic diseases? I submit that the results would be devastating.

Adequate funding for public health must be assured. Without sufficient funding, Maryland citizens could see a rapid reversal in the impressive strides made over the past several decades to make our state and country as safe and healthy as it is. If we are not vigilant, we may be confronted by a resurgence of the disease outbreaks and health problems faced in the early part of this century, as well as the new threats posed by modern society. We must support the public health programs and services that are vital to the health of our citizens.

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Letters To The Editor

The editorial board of the *Maryland Medical Journal* welcomes comments, criticisms, recommendations, and observations from all its readers. Please submit letters to

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Baltimore's public health contributions and today's problems

John B. De Hoff, M.D., M.P.H.

Dr. De Hoff is the former commissioner of health for Baltimore.

ABSTRACT: *The health department's early development and the protective roles of public health roles are described. Qualifications for public health leadership are examined. The diminishing and changing nature of services resulting from continuing federal and state cutbacks are discussed. New public health policy requires major changes in national ideology and politics.*

Only a few decades ago, when physicians or residents of cities and counties spoke of public health, they meant their local health departments. Without question, public health was centered in, and developed from, those local health agencies. Still known for their protective work in health education and sanitation, these "healthy departments" are charged by law with keeping their respective populations safe from preventable diseases and dangerous environments.

In earlier years of organized public health activities, marshes and their noxious effluvia, decaying animals and plants, and fomites were suspected of harboring transmissible disease causes. Contagion was less well understood, and effective vaccines, other than cowpox, had yet to be developed. Deaths from infectious diseases such as diphtheria, scarlet fever, polio, meningitis, tuberculosis (TB), typhoid, or any of the pneumonias were real threats to families. Many patients who recovered from these acute infections often experienced long-term disabilities, loss of employment, or even impoverishment.

Public responses to these potential health dangers included the construction of Sydenham Hospital—now the Montebello Rehabilitation Hospital.[1] This special hospital cared for persons with acute communicable diseases from the time when there were no specific treatments available until the beginning of the antibiotic era. Sydenham's clinical records documenting infectious disease therapy from 1909 to 1949 are preserved in the National Library of Medicine as an example of one municipality's public response to acute infectious illness control.

Health departments' clinical and industrial laboratory services, vaccination, school health programs, maternal and child health care services, public general hospitals and special hospitals for infectious diseases, clinics for the treatment of sexually transmitted disease (STD) and TB, and programs to provide sanitary inspection of housing and food supplies were established to keep citizens healthy. Waste disposal, water purification, and housing inspections remain health department tasks.

> It shall be the duty of the commissioner of health, from time to time, to make a circuit of observation to the several parts of the city and its environs, which, from their location, or from any collateral circumstances, may be deemed the cause of disease, and in all cases where he may discover the existence of any agent, the presence of which will prove dangerous to the health of the inhabitants of the city, he shall cause any ordinance in existence for its correction to be enforced, or if there be no ordinance competent to the correction of the evil, he shall make a full report of all the attending circumstances to the mayor, accompanied with his opinion of the necessity of extraordinary or particular actions. It shall be his duty also to make diligent inquiry and investigation into all cases or reports of cases of communicable diseases which may occur or come to his attention, and cause such immediate measures to be taken as are particular to arrest their progress, and generally to notice all things that relate to the preservation of the health of the inhabitants of the city.

Figure 1. Baltimore City Health Code of 1879, Article 23, Section 5

Quarantine has long been used as an effective public response for controlling the spread of communicable diseases. In the 1920s, for example, children with pertussis were required to wear orange-yellow arm bands labeled "WHOOPING COUGH" as a warning that susceptible adults and other children should avoid contact with them. Sporting the arm bands and under a kind of ambulatory quarantine, symptomatic infected children were kept out of school but were permitted to play in their own neighborhoods with immune children. Health department officials also placed placards on private dwellings in which there were cases of measles or scarlet fever to warn visitors that infection lurked inside. Before any house quarantine was lifted, officials fumigated sickroom areas with an acrid, formaldehyde-like smoke in a further attempt to limit spread of disease.

This tradition was present as recently as the 1980s when a research team experimenting with respiratory viruses wanted to minimize transmission of an infectious agent. In search of a nearly perfectly isolated hospital ward, they asked that it be officially quarantined. The Baltimore City Health Department's chief of communicable disease agreed, and he made and hung at the elevator entrance to the experimental floor a traditional sign of contagion—the yellow flag warning of quarantine (the yellow jack).

Two centuries ago when yellow fever was decimating the population of Philadelphia and then threatened Baltimore Town, elected authorities appointed their first health officials who imposed quarantines by land and by sea. Dr. Worthington and Dr. Ross were asked to protect Baltimore citizens from a deadly disease of unknown nature—a task worthy of an army of defenders. Their work began a community service that continues today as the mayor's official health protection arm.

Relationships and duties of official health agencies were detailed in Baltimore's health code of 1879.[2] More than a hundred years ago, the code described the health commissioner's roles in terms fully applicable to today's health conditions, condensing almost all the general and important responsibilities of a health officer in its opening sentence (**Figure 1**).

In 1879, Baltimore was small enough that, by horse and buggy or on foot, the commissioner and helpers could personally inspect areas and conditions thought to endanger the public's health. This kind of direct observation, called "shoe leather" epidemiology, is extended by other techniques, one of which is the direct reporting of diseases and injuries by physicians, hospitals and other caregivers.

The code of 1879 also adjured the commissioner of health "generally to notice all things that relate to the preservation of the health of the inhabitants of the city." Furthermore, "in all cases where he may discover the existence of any agent, the presence of which will prove dangerous to the health of the inhabitants of the city, he shall cause any ordinance in existence for its correction to be enforced ... if there be no ordinance competent to the correction of the evil, he shall make a full report of all attending circumstances to the mayor, accompanied with his opinion of the necessity of extraordinary or particular action." That reporting requirement helps to keep the chief elected official aware of the health status of people in a jurisdiction. Advice about what should be done to improve unhealthful living conditions is a major role of every health director, as are health law enforcement and codification of sanitary regulations.

The health officer's broad scope of action for health is limited only by a political subdivision's borders. Health department staffs have the duty to intervene whenever a public health risk becomes apparent and have the right to enter buildings, subject only to civil restrictions that apply also to other governmental agencies. Whenever the public health of inhabitants is endangered, health departments are expected to take necessary remedial actions or plan for correction of health threats. Thus,

a health department must be considered as a division of public safety, equivalent to fire and police departments, when prompt actions are needed to protect or preserve human health.

Public health departments are governmental agencies and derive authority from the laws of their jurisdictions. Each reports to a mayor, county commissioner, governor, or the president of the United States, and operates in accord with the policies of one or all of these elected officials. This relationship sets health departments apart from practicing physicians, hospitals, and other health professionals because health officers must enforce health code sections governing activities of each licensed or credentialed profession.

Health department directors require experience in fields other than personal care, including special preparation in addition to medical or professional school training. An article in *JAMA* recognized this a century ago when it noted that "there has probably been no time in the history of this country when trained, competent, and efficient health officers were needed so much as they are now."[3] In general, the director of a major health department should be a physician specially trained in public health disciplines and with board certification preferably in general preventive medicine. Public health practice is a complex field, requiring the combined efforts of 20 or more professional skill groups to accomplish its tasks.[4] Management of large health departments and relationships with elected officials requires administrative and policy skills not frequently used in the private practice of medicine.

Both mutual respect and tensions have always existed between public health officials and private practice physicians, much like traditional "town and gown" rivalries. Private practice and public health practice have different missions and report to different authorities, but workers in both fields have a special social accountability in which success is measured by the health of people. Procedures and work products may vary, but health departments and medical societies have found they can work cooperatively to advance the public's health. For more than 25 years, the Baltimore City Medical Society has worked continuously with the Baltimore City Health Department, currently through its Liaison Committee.

In a report on the future of public health, the Institute of Medicine (IOM) defined the mission of public health as "fulfilling society's interest in assuring conditions in which people can be healthy, and is accomplished through organized community efforts aimed at the prevention of disease and the promotion of health."[5] Public health, the IOM report noted, links many disciplines and rests on the scientific core of epidemiology. Government's role lies in public health assessment, policy development, and assurance of good health for the public. Local health departments are the front line of public health agencies, responsible for direct delivery of public health services. The IOM report concluded that public health is more than what health departments do—important roles clearly exist for the private sector and for public–private partnerships.

Public health is in a dangerous situation today. Budget-cutting and privatization efforts of the last several national administrations have markedly reduced state and local public health efforts in health improvement and disease prevention.[4]

Austerity policies in health services, with reduced government health expenditures and weakened regulations for effective occupational health and safety and environmental health, have undermined these services' effectiveness.[6] In a recent article, Wasserman et al[7] stated that decreases in budgets, staffing, and services due to FY91 and FY92 budget cuts resulted in program reductions varying from 14% in immunizations to 44% in maternal and child health. Politics and decline or rapid turnover in public health leadership at all levels of government have damaged severely the US public health system.[5]

Clearly, public health is different from what it was when Baltimore Town launched its official fight against contagion by ordering two physicians to keep yellow fever from coming down the Philadelphia Pike or into Baltimore Harbor. Just what the next century's health departments will be like is up for grabs. Medicare, Medicaid, and private insurance provide payments for illnesses or injuries that could or should have been prevented. Sick care is a leaky, almost bottomless barrel into which more and more money can be poured with diminishing marginal results.

Effective work to prevent disease and protect health shares importance with reparative sickness care. Whether accomplished through official agencies or by private physicians and voluntary health organizations, it simply must be funded sufficiently to reduce the money that now has to be spent on disease care. The public wants to retain its healthiness and avoid illness, not just regain, even completely, health damaged by illness or injury. Here is where preventive medicine (health education and promotion) can enter with professionally based encouragement to change lifestyles and provide effective protection against environmental hazards. Nontreatment activities such as these should become life-long personal disciplines, but they lack instant appeal, perhaps because patients see no immediate benefit while they continue to keep their good health.

Health departments find it difficult to adapt to the flow of health funding that is aimed at sickness repair but which neglects disease prevention. With more funds labeled for personal care that can be provided elsewhere, health departments are less able to staff underfunded clinics for lower income persons with communicable diseases who live in hard to reach places. In all probability, care of epidemic or endemic diseases and those requiring difficult follow-up will fall to health departments. In private conversations, some health officers have admitted they rely on personal, comprehensive care clinics

to justify their department's very existence at budget times. Instead of treating patients, however, future health departments may depend on public health nursing services, environmental hazard control, health code enforcement, health data collection and analysis, and other supervisory activities that private organizations cannot legitimately or economically carry out. This will require that all levels of government recognize the important of these tasks and provide adequate, stable funding to carry them out.

Major changes in public health services require the consent of elected officials and a knowledgeable public, and should be conducted with advice and guidance from associations and public health schools. To date, little interest has been shown in developing new health department models designed to manage twent-first-century public health problems. The list of challenges is long and includes improved community relations; modern administrative technologies for rapid processing of statistical and epidemiological information; flexible staffing that includes continuing education for new tasks; and advanced health promotion techniques to meet community desires for better health.

Changes in local health department services, if they occur, may be slow, painful, and dependent on other developments in the complicated field of public health. Yet, if health departments are really the public's front line of defense against illness and injury, pressure for their betterment should be coming from professional societies, public health schools, citizen groups, service organizations, and business leaders as well as public health director associations.

"Public health policy in the 1990s will be determined not only by factors intrinsic to the health field but by external circumstances related to international and domestic political and economic changes.... Gains in specific areas of public health will undoubtedly be made in the coming decade, but fundamental changes in public health policy will require far-reaching changes in the nation's ideology and politics."[8]

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Baltimore City Health Department: 200 years of progress and partnership

Peter L. Beilenson, M.D., M.P.H., and A. Soula Lambropoulos, M.S.

Dr. Beilenson is the commissioner of health for Baltimore City. Ms. Lambropoulos is the assistant to the deputy commissioner of health, Baltimore, Maryland.

ABSTRACT: *The Baltimore City Health Department began its long history of protecting the health of Baltimore citizens in 1793. An outbreak of yellow fever in Fells Point on the northwest branch of the Patapsco River was the impetus for the governor's appointment of the first two health officers. Since that time, the health department has worked closely with the medical community to promote education and preventive measures (e.g., sewer systems, water chlorination, food inspection) in order to stop the spread of communicable diseases. For 200 years, the Baltimore City Health Department has provided "the advocacy and leadership necessary to ensure the protection and promotion of the health of Baltimore's citizens."*

Baltimore has a long tradition of civic interest, activism, and pride in the health and well-being of its citizens. The need, however, for a public health department was quite obvious before the Baltimore City Health Department's inception in 1793. During the meetings of the Continental Congress of 1776 and 1777, delegates complained regarding the lack of cleanliness. Oliver Wolcott of Connecticut called Baltimore "the most dirty Place I was ever in." [1] Matthew Thornton of New Hampshire wrote that in Baltimore "the man with the Boots has very great Advantage over a man with Shoes, the Carriages are Stoped (sic) by the Depth of the mire in the middle of the Street...." [2]

Public health policy is defined by the calamities that grip the public. Baltimore's public health institutions have always risen to meet the individual plagues of the day. One of the city's early public health concerns was yellow fever, caused by a then unknown entity and with seasonal fluctuations in its virulence. Baltimore's early public health history was, therefore, the early history of yellow fever in this country. In November 1785, several prominent Baltimore citizens petitioned Governor William Paca to establish a health

office to address a variety of scourges and pestilential diseases.[2] Governor Paca left office at the end of that month, and no evidence has been found regarding his response to the petition. Shortly thereafter, outbreaks of yellow fever and smallpox intensified the need for a public health officer.

In 1791, New York was overcome by an outbreak of yellow fever; Philadelphia succumbed the following year. In fact, the Philadelphia outbreak caused 10% of the city's 40,000 inhabitants to perish.[3] In 1793, Baltimore became a port of refuge for the French who fled the Haitian revolution. In the sweltering heat of that summer, yellow fever broke out in Fells Point on the northwest branch of the Patapsco. On September 12, 1793, Governor Thomas Sim Lee issued a proclamation appointing Drs. John Worthington and John Ross as Baltimore's health officers. Their duties were to prevent the spread of yellow fever into Baltimore.[4] Dr. Ross served as the quarantine physician responsible for stopping yellow fever at Baltimore's port;[5] Dr. Worthington was responsible for patrolling the traffic on the northern roads linking Baltimore and Philadelphia.[6] These health officers, also referred to as quarantine physicians, inspected arriving ships at Whetstone Point (to the west of what was later to be known as Fort McHenry, on the northeast branch of the Patapsco River) to determine if they were safe to dock or if they required quarantine. In 1794, Thomas Drysdale, a student of Benjamin Rush, the top physician of the day, was also appointed as a health officer.

During a town meeting in the summer of 1794, a Committee of Health was created and a quarantine hospital at Hawkins' Point (located at the south end of where the Francis Scott Key Bridge now stands) was authorized. The committee, chaired by Alexander McKim, informed Baltimore's citizens that there was no longer any evidence of yellow fever. "And though the town is sickly, yet no other disorders prevail but those common to the season...."[7] It is important to note the astute observations of the colonial physicians who recognized that yellow fever epidemics occurred in the summer and fall and disappeared with the arrival of the first frost.

On January 1, 1797, Baltimore was incorporated as a city. Since that time, public health legislation in Baltimore City has continued as an extension of the two major health ordinances of 1797 (i.e., Ordinance No. 11 and Ordinance No. 15). "The former dealt particularly with the control of pestilential diseases and the latter with the control of nuisances and other matters of general sanitation."[8] The "placing of the powers and duties of the health department under nine commissioners of health was... done with the intention of having all sections of the city fully and forcibly represented."[9]

Ordinances 11 and 15 have undergone many revisions in the 196 years since they were written. Early modifications were most likely initially influenced by the development of smallpox vaccine and by John B. Davidge, M.D., who, in 1797, was the first to publish a statement, in the *Federal Gazette of Baltimore*, that yellow fever was not contagious[10] but was transmitted by the white-legged *Aedes aegypti* mosquito. By the end of 1797, the health department had two clearly defined roles: (1) keeping contagious diseases out and (2) cleaning up rubbish and inspecting meat and fish brought into the city's boundaries.

Despite public assurances that yellow fever was not contagious, the debate was not quelled. The 1797 epidemic delayed the "outfitting and commission of the USS *Constellation*.... The stately new frigate slid down the ways at Fells Point and majestically came to anchor one-hundred yards offshore."[10] Workers were afraid to come out of their homes. The controversy regarding yellow fever ensued for years. Even President Thomas Jefferson's 1804 State of the Union address did not persuade people. Not certain as to whether or not quarantines prevented the spread of yellow fever, the health department continued addressing the threat with quarantine and sanitary measures. Although Baltimore suffered its last serious yellow fever epidemic in 1819, an 1821 ordinance required the Board of Health to fence in and guard all those districts with yellow fever, and a yellow flag (yellow jack) was displayed in the infected area.

Finally, in the health department's 1830 annual report, consulting physician Horatio Jameson, M.D., urged the mayor and city council to bring the city's antiquated quarantine regulations in line with the modern belief that yellow fever was not contagious. Quarantines against yellow fever were eventually dropped in the nineteenth century (although the World Health Organization (WHO) still considers yellow fever a quarantinable disease). The quarantine method proved useful in the 20th century, however, with respect to scarlet fever, diphtheria, smallpox, and, more recently, in a limited way, along the US borders in the case of individuals infected with human immunodeficiency virus (HIV).

The health department's internal structure was reorganized several times in the 1800s. In 1801, the number of health commissioners was reduced from nine to five, with each commissioner allotted one district. In 1803, the number of commissioners was decreased to four, but their authority was increased with power over nuisances on private properties, including docks. In 1808, the position of quarantine physician was abolished, and the number of commissioners reduced to two. In 1815, the department's first annual report was published. By 1817, the department's oversight included springs and wells that were now required to be protected from nearby privies and cesspools to safeguard drinking water from contamination. In 1820, a consulting physician was appointed to advise the mayor regarding the city's health.

The health department's mandates grew as sanitation technology advanced. In 1824, French drains were constructed to clear water from streets, promote better sanitation, and elimi-

A Proclamation: Thursday 12th September 1793

Whereas it appears by the representation of a number of respectable inhabitants of Baltimore town, accompanied by a report from several eminent Physicians of the said town that a malignant and highly contagious fever is at this time raging in the City of Philadelphia, and that through the constant intercourse between that City and Baltimore there is great reason to apprehend that this fatal disease will be introduced into the said town unless immediate measures are taken to prevent so great an evil, And Whereas by the Constitution of this State, the Governor for the time being is authorised to order and compel any Vessel to ride quarantine, if such Vessel or the port from which she may have come, shall on strong grounds be suspected to be infected with the Plague and Whereas in the present case the exercise of this authority according to the letter thereof without taking similar precautions by Land would not effect the purpose evidently contemplated by the said Article of the Constitution, of securing the good people of this State from such dreadful visitation, I have therefore thought proper to issue this my Proclamation Ordering the directing that all Vessels coming immediately from Philadelphia or from any place to which the aforesaid Malignant disorder may have spread, and all Vessels having persons or goods on board coming from Philadelphia or any other infected place be subject on approaching the Harbour of Baltimore town or any other Harbour within this State to the performance of a quarantine not exceeding forty days; or as much less as shall be judged safe by the persons appointed or to be appointed Health Officers for the different towns and Harbours aforesaid, and I have with the advice of the Council thought fit further to direct that all persons coming to Baltimore town, to Havre de Grace, to the Head of Elk or by any other route making their way into this State from Philadelphia or any other place known to be infected with the said disorder shall be subject to be examined and prevented from proceeding, by the persons who will be appointed for the said purpose, and who will be instructed to take the opinion and advice of the Medical faculty in every case, in order that private affairs and pursuits may not be unnecessarily impeded.

And as the town of Baltimore by its extensive trade and populations is the place in which the introduction of the said disorder is most likely to happen, and its effects the most to be apprehended, I have thought proper to proceed without delay to the nomination of persons for that place, and do accordingly appoint Doct'r John Ross Health officer for the approach by water, and Doct'r John Worthington Health Officer for the approach by Land to the said town, with full power to stop and prevent the landing or entrance of all persons who according to appearances and the best information they can procure shall have come immediately from the City of Philadelphia or other infected place and in like manner of goods or articles of any kind, and the Faculty of Baltimore town are hereby authorised and requested to assist the said Health Officers with their Judgement and advice in every doubtful Case: and until particular persons shall be appointed for other places, the Justices of the Peace and officers of every kind are hereby authorised to take steps consistent with the tenor of this proclamation for their own safety, and that of their fellow-Citizens and all public Officers and the good Citizens of this State in general are hereby called upon to be aiding and assisting towards effecting the object of this Proclamation.

Given at the City of Annapolis under the Seal of the State of Maryland this twelfth day of September in the year of our Lord One thousand seven hundred and ninety three

By his Excellency Thomas Sim Lee Esquire Governor of Maryland

nate disease and pestilence caused by accumulated filth. In 1845, the department was again reorganized with one commissioner of health and one city physician, who, with the health officer or quarantine physician, constituted the Board of Health. In 1861, the offices of city physician and commissioner of health were combined and an assistant commissioner of health was provided. During the late 1800s, the commissioner of health was authorized to order all postmortem examinations through the contracting of surgeons; made registrar of vital statistics; was empowered to appoint a chemist and food inspectors; and was authorized, in 1896, to establish chemistry and bacteriology laboratories. These laboratories allowed for milk analysis and the first systematic study of the city's water supply. The laboratories were an invaluable tool in the fight against typhoid. In 1900, the Board of Health was abolished, and the commissioner of health was given sole responsibility for the health department. Since that time, the law has required that the commissioner of health be a physician with a minimum of five years of experience and in active practice at the time of his or her appointment.

In 1896, a turning point occurred in the health department's attitude toward communicable diseases. From that time on, the department made a "more serious effort to apply consistently old knowledge and theories, with modifications and amplifications, under the stimulus of the rapidly accumulating knowledge of modern chemistry, pathology, and microparasitology."[9] The commissioner of health strongly urged physicians to report cases of disease and suggested more funding and appliances, better training of corps of disinfectors, sufficient hospital facilities, and better supervision of the infected. Prior to these more aggressive modalities, "patients were discharged from isolation and quarantine under no fixed rules and on the certificate of the attending physician that in his opinion danger of transmitting the disease had passed.... He [the commissioner of health] suggested a system of school inspection and the inauguration of measures to prevent pulmonary tuberculosis."[9] In 1905, a system of medical inspection of school children by the department's first nurse was created. In 1909, the Sydenham Hospital was opened for patients with scarlet fever and diphtheria. By 1910, a division of tuberculosis that included nurses and dispensaries was begun. The Bureau of Child Welfare was established in 1919, its focus being lowering morbidity and mortality among the very young and their mothers.

Throughout its 200 years, the Baltimore City Health Department has promoted preventive policies that attempt to anticipate and remedy diseases prior to their swelling into an epidemic. The 1793 appointments of Drs. Worthington and Ross began this tradition of prevention and response to contemporary problems when the major public health concern was yellow fever and other contagious diseases. Today's public health concerns are different (e.g., cancer, heart diseases, acquired immunodeficiency syndrome (AIDS) and environmentally related diseases). Yet, the basis underlying the work and accomplishments of the Baltimore City Health Department remains constant: to protect, insure, and continue the sound health of the citizens of Baltimore through preventive measures and education.

Advanced medical technology and improvements in civil engineering resulted in tremendously beneficial public health changes in the twentieth century. When the century began, Baltimore lacked a sewer system, clean water, and pure milk—all of which caused frequent typhoid deaths. However, the partnership between the Baltimore City Health Department and the medical community resulted in the milk ordinances of 1908 and 1917, the 1911 opening of the sewer system, and the chlorination of water beginning in 1911, all of which effectively eradicated typhoid from Baltimore City. The support given by the medical community to the Baltimore City Health Department's efforts in addressing a variety of issues (e.g., prevention of yellow fever, diphtheria, scarlet fever, tuberculosis, polio, AIDS, sexually transmitted diseases, lead paint poisoning, and teen pregnancy, as well as mental health and addiction services, vaccinations, domestic and occupational safety, and minority health issues) has been ever-present.

Today's preeminent viral epidemic is AIDS. As they did in 1793 with the yellow fever epidemic, private physicians, community advocates, and the Baltimore City Health Department are working together to treat the sick and prevent the spread of the disease. Baltimore's private physicians have been an integral part of the city's public health structure and the workings of the Baltimore City Health Department. Throughout the years, physicians—whether as individuals or as members of the state and city medical organizations—have been leaders and supporters of public health standards and services. As stated in the Baltimore City Health Department's mission statement, the emphasis of the department is to function "as the local public health authority, ... to serve as an architect and catalyst for needed change in the health and human services systems of Baltimore City. We will provide the advocacy and leadership necessary to ensure the protection and promotion of the health of Baltimore's citizens."[11] We do so in keeping with the theme of our 200th anniversary celebration: "200 years of partnership and progress."

The Baltimore City Health Department invites you to join in its bicentennial celebration by reading this issue of the *Maryland Medical Journal* in which health department physicians, public health workers and administrators, and colleagues in the private sector have written about their work. The Baltimore City Health Department is proud to have been an integral part of health care in Baltimore for the last 200 years.

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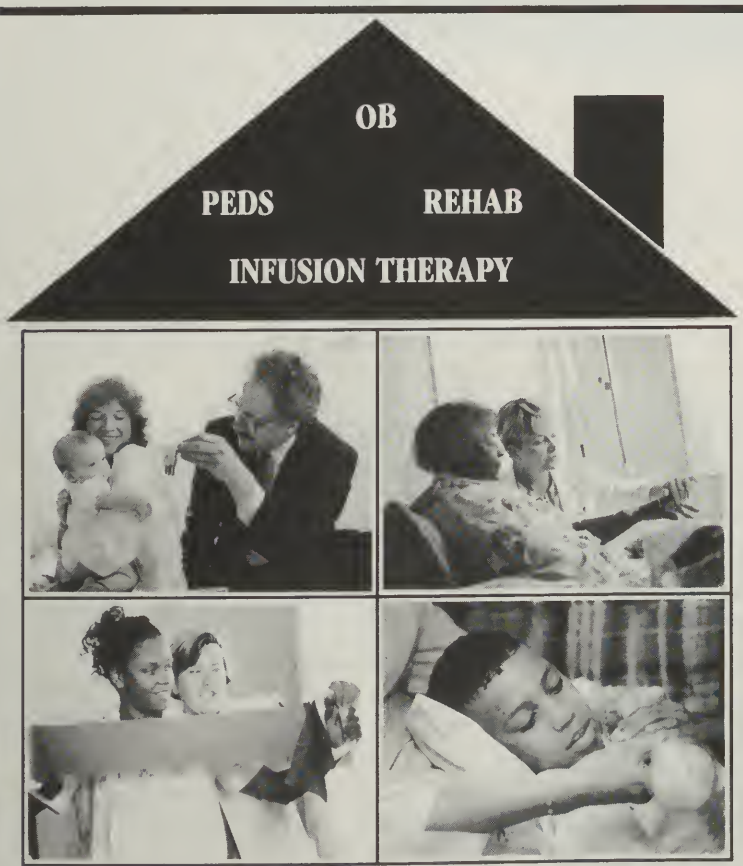
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Partners in community health: The Baltimore City Health Department, the Johns Hopkins School of Hygiene and Public Health, and the Eastern Health District, 1932-1992

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ABSTRACT: *The Eastern Health District of Baltimore was established in 1932 as an early partnership between the Baltimore City Health Department and the Johns Hopkins School of Hygiene and Public Health. Although its heydey occurred in the thirties and forties, for 51 years the district has provided data for researchers studying community health problems; learning opportunities for students in medicine, nursing, and public health administration; and a wide array of clinical and public health services to urban residents. The Eastern Health District concept has been copied worldwide, and although the partnership between the health department and the school of public health has changed over the years, some collaborative activities continue the tradition of research and service provision.*

The Eastern Health District of Baltimore, established in 1932, was the most famous result of the early partnership between the Baltimore City Health Department and the Johns Hopkins School of Hygiene and Public Health. Participants in this joint venture had different but complementary interests: Hopkins faculty wanted to do research on community health problems and teach students practical methods of public health administration; Baltimore City Health Department staff wanted to demonstrate how public health services could best be provided in an urban setting.[1] These goals were broadly endorsed within the larger public health community. The joint project was funded by the Rockefeller Foundation and warmly supported by Joseph W. Mountin of the US Public Health Service (PHS).[2]

In 1932, the Eastern Health District was composed of 60,000 people in 15,000 families living in approximately one square mile of East Baltimore immediately surrounding the school of public health—bounded on the west by Caroline Street, on the north by Chase and Eager streets, on the east by



Figure 1. A public health nurse ready for home visits in the Eastern Health District. (Baltimore City Health Department.)

East Avenue and Loney's Lane, and on the south by Baltimore Street. It was a settled working class neighborhood with a high proportion of homeowners. Although the majority were German and Scandinavian, there were recent Irish and Italian immigrants and African-American families who had moved to the city from the Maryland countryside, North Carolina, and Virginia. The area consisted of neatly kept row houses adorned with Baltimore's famous white marble steps and hand-painted screen doors; many churches, doctors' offices, and corner stores; and just enough saloons, bars, and houses of prostitution to alarm some of the area's more righteous citizens.

Organization of the Eastern Health District

The Eastern Health District was jointly administered by the Johns Hopkins School of Hygiene and Public Health and the Baltimore City Health Department. This dual administrative structure was not an easy one.[3] The district health officer, a city health department member and faculty member in the school of public health, was supposed to balance the needs of research, education, and community service when these were in conflict. In the district's first decade, research was stressed as much as, or perhaps more than, education and service. From 1940 to 1960, however, teaching and community service gradually came to dominate the district's activities. In part, this shift reflected the priorities of Huntington Williams, the commissioner of health, who thought researchers' interests should be subordinated to efficient administration and service delivery.

Many who worked in the district went on to distinguished careers elsewhere. The first Eastern Health District officer, Harry Stoll Mustard, later became commissioner of health in New York City.[4] A master tactician, his political skills proved essential to his success as a public health administrator. Martin Frobisher, head of the district's diagnostic laboratory, later became chief bacteriologist at the Centers for Disease Control (CDC). Others were equally dedicated and talented, including the later Eastern Health District officers—C. Howe Eller, Harry Chant, and George Silver.

The public health nurses were, however, the backbone of the Eastern Health District (**Figure 1**). Katherine Peirce and Mary Johnson, the first nurse supervisors, were assisted by a field staff of fourteen. They provided health education, interpreted physicians' findings to patients, gave instructions on isolation techniques to families of tuberculosis (TB) patients, prepared admission forms to sanitoria, followed up on venereal disease (VD) cases, assessed home conditions before the discharge of premature infants from the hospital, and, in emergency cases, gave bedside care. These nurses understood the health context of the family and community; they knew the social and economic pressures on working class patients and were often able to mediate between the world of the community and the more rarified perspective of the hospital or doctor's office. In addition, sanitarians and inspectors from the city health department moved in and out of the district to investigate milk or meat



Figure 2. A child health examination, Eastern Health District, 1948. Special research studies focused on hearing impairment, vision problems, and common infectious diseases. (Rockefeller Archive Center, Tarrytown, New York.)



Figure 3. A nurse weighing a healthy baby in the Eastern Health District well-baby clinic. (Rockefeller Archive Center, Tarrytown, New York.)

quality complaints, to inspect for rodents or other nuisances, to test the air for environmental pollutants, and to examine workplaces for industrial hazards.

The work of the district began in a building on Orleans Street but soon moved to a Monument Street row house to be closer to the school of public health; it remained there until 1955 when a new building was built on Caroline Street. In 1938, the district was expanded, almost doubling its population size. At the same time, the rest of the city's health department programs were reorganized on a district basis, following the model of decentralized local administration.

Many district services concentrated on child health problems (**Figure 2**) such as measles, hearing impairment, and dental health. The district provided prenatal clinics and well-baby clinics (**Figure 3**); free smallpox vaccinations; diphtheria anti-toxin; medical, dental, and eye examinations; child care instruction; doctor and hospital referrals; and a constant stream of health advice distributed to anyone who would read or listen. Public health clinics provided about 50,000 medical examinations each year—approximately one per inhabitant. All newborn children were closely followed.[5] As the *Baltimore Sun* reported, "every child in the district, and a good share of adults, comes sooner or later into the grasp of a health officer or nurse. No child can escape. Some of them are under the benevolent dictation before they are born."[6]

The most important achievement of the first year was a health survey that provided information on the health, sickness, and social conditions of each member of every family in the district. The public health nurses and students worked for seven weeks gathering information door-to-door; the resulting family files would provide a basis for many future statistical studies.[7] The *Baltimore Evening Sun* explained:

> Inquisitive visitors who ask very personal questions are no novelty to the people who live in Wards 5, 6, 7, 10, and the three borderline census tracts of Ward 8. They are, by all odds, the most interrogated, surveyed, examined, investigated and card-indexed citizens of Baltimore—and probably of the 48 states, Alaska, Hawaii, Puerto Rico, and the Philippines.[8]

This district census survey was repeated in 1933, 1936, and 1939, providing a wealth of information on the health status of all district inhabitants and supplying data for many student theses.[9] TB, for example, received much attention as students and public health nurses charted a continuing decline in TB mortality and morbidity, despite a continuing high rate of infection.[10] In 1937, Wade Hampton Frost, professor of epidemiology, was able to argue, in words that have a tragic relevance today:

> We have already reached the stage at which the biological balance is against the survival of the tubercle bacillus.... This means that under present conditions of human resistance and environment the tubercle bacillus is losing ground, and that eventual eradication of tuberculosis requires only that the present balance against it be maintained.[11]

The Eastern Health District also focused on diphtheria, then one of the most prevalent diseases affecting young children. Under Martin Frobisher's direction, workers tested different immunization procedures and documented progress in controlling the disease.[12–15] Soon, diphtheria would vanish as a serious childhood threat.

Chronic diseases

In 1938, the Eastern Health District, in cooperation with the PHS and the Milbank Memorial Fund, started an intensive study of chronic illness in the local population. At the time, little was known about the incidence of chronic disease or common infections, and the survey established a database for public health studies and programs.[16] Researchers conducted monthly house-to-house surveys of about 1,500 families, asking about all illnesses and medical care received. They found the main illness causes were minor respiratory diseases (almost half of the total),

accidental injuries, "degenerative diseases" (including rheumatism, arthritis, and diseases of the heart and arteries), and digestive disorders.[17] The illness rate was approximately one per person per year; chronic diseases were by far the most important source of illness, time lost from work, and mortality.[18] Some 25% of all district families suffered from chronic diseases, and a small proportion appeared to suffer much higher rates of illness, possibly because of poor nutrition.[19]

Mental hygiene

Much district research involved community-based mental hygiene studies. Dr. Adolf Meyer, director of the Phipps Clinic, was trying to develop a "socially-oriented psychiatry" in which psychiatrists and nurses would work with physicians, teachers, charity organizations, and clergy to promote mental health within communities.[20] At the same time, Wade Hampton Frost wanted to measure the prevalence of mental illness in a defined community since nobody knew how mental health problems were distributed in a normal population. The Rockefeller Foundation funded this research on the grounds that "while geneticists have minutely observed the fruit fly through hundreds of generations, and nutritionists and cancer researchers have life histories of the white rat and the mouse, the human individual—the presumed beneficiary of all this study—remains in large measure unknown."[21]

District staff collected records of people who had been seen at mental hygiene clinics, had been reported to the police, or had exhibited "behavior indicating the probability of some mental defect or disorder."[22] About 6% seemed to fall into this general category. These individuals were classified into reaction types: psychotics, psychoneurotics, psychopathic personalities, post-psychotics, mental deficients, epileptics, and the maladjusted. While these early studies seem almost comical from a modern perspective, they constituted pioneering efforts to measure the prevalence of mental disorders in a community.[23–26]

The mental hygiene program staff went beyond measurement and tried to prevent problems by educating mothers in proper child care methods. According to one of the psychiatrists, Ruth Fairbank, many mental ills and resulting social problems began with a lack of parental discipline: "Common sense must grant that the period of growth is the ideal time to develop and foster such habits as emotional control, self-reliance, self-dependence, and the ability to get on with one's fellows."[27] In 1935, therefore, the Mental Hygiene Study opened a Mothers Advisory Service (**Figure 4**).[28] Psychiatrists, psychiatric social workers, and nurses offered advice on routine child behavior problems, such as bed-wetting and temper tantrums; the mothers were grateful and many returned regularly to report their progress. This popular service was gradually expanded by offering a psychiatric consultation service to all district physicians and by adding group therapy sessions where mothers could discuss child-rearing problems. Paul Lemkau, a psychiatrist who became director of the program, later commented: "This was conceived to be a preventive activity. Nobody has ever shown that it was, but it was conceived to be. Certainly, it was obvious that it made people feel better...."[29]

Lemkau did much to develop the mental hygiene field, as it was then called. He developed a popular course using family case study conferences in the Eastern Health District and a textbook used by several generations of public health students, *Mental Hygiene in Public Health*.[30] He extended mental hygiene research and published papers on the prevalence of mental health problems in the community—many written with Christopher Tietze, a talented statistician, and Marcia Cooper, a devoted student who became a psychologist for the Mothers Advisory Service.[31–36]

Syphilis

One important infectious disease project in the district was a study of syphilis started in 1936 by Thomas B. Turner, later dean of the Johns Hopkins School of Medicine.[37] A skilled laboratory scientist with field experience in international health, Turner gathered data on the incidence and prevalence of syphilis in the local community as a baseline against which the relative success of syphilis control efforts could be measured.

The district staff undertook extensive community surveys, collected available records, and encouraged hospitals and private practitioners to conduct Wassermann tests.[38–39] The staff attempted to find, examine, and treat the sexual contacts of all those infected. The published results gave an epidemiological picture of syphilis in an urban community.[40–42] The syphilis program also trained VD control specialists for the entire country. During World War II, Turner became head of the US Army's VD control program. Syphilis research continued through the war years, and, in 1945, the Eastern Health District helped evaluate the treatment of syphilis by the "miracle drug," penicillin.

Community-based research and teaching

The district was a site of community-based health studies during and after the war years. During the war, the rodent ecology project studied rat behavior, tested poisons, and explored methods of controlling the rat infestation of inner city neighborhoods—eventually concluding that rehabilitation of old and dilapidated housing was the only effective method of keeping rat populations under control. The child and maternal health services focused attention on prenatal care and well-baby clinics, and their work helped keep infant mortality rates in the district well below those of the city as a whole.

The Eastern Health District was an undeniable success. Throughout the 1930s and 1940s, officials and students came



Figure 4. The Mothers Advisory Service, part of the mental hygiene program of the Eastern Health District. Attention to early childhood development was intended to prevent mental health problems. Here, a psychiatrist interviews a mother while her children are playing, 1941. (Rockefeller Archive Center, Tarrytown, New York.)

from all over the world to observe the research and training programs—staying for a few hours or for weeks at a time. They copied and emulated the Eastern Health District in cities as diverse as Mexico City and Peking. In 1938, the International Health Division of the Rockefeller Foundation described the district as "an outstanding success in providing practical field training for students in public health; in providing a population group, exceeding 100,000, unequalled anywhere in the country for study purposes because of the complete family records now available; and in elevating public health standards and practices in the City of Baltimore, as well as serving as a model and stimulus for comparable developments in other schools of public health." [43]

In the 1940s, district staff consisted of one full-time and one part-time health officer, and approximately 29 part-time physicians, mostly general practitioners, who worked in maternity, child health, VD, and TB clinics, and served as school physicians in the district's elementary schools. A part-time dentist and full-time dental hygienist working in the dental clinic made routine dental services available to all school children.

Like the health officer, the nursing supervisor taught public health administration at the school of public health. Twenty-five staff nurses provided nursing services in public health clinics, assisted by aides who received on-the-job training. Specialized public health services were directed by heads of the corresponding city health bureaus, such as the Bureau of Communicable Diseases, the Bureau of Tuberculosis, and the Bureau of Child Hygiene. Bureau responsibilities included milk and meat inspection, rodent control, industrial hygiene, housing, communicable disease control, child hygiene, school hygiene, dental care, health information, mental hygiene, and nutrition.

The district provided public health nursing training to all newly employed health department nurses and to senior student nurses from the Johns Hopkins and Sinai Hospital schools of nursing. The curriculum included TB control, VD, mental health, and nutrition, and emphasized the recognition of health and interrelated social problems and cooperation with social agencies in promoting a safe and sanitary environment.

Candidates for the masters of public health degree at Johns Hopkins spent six mornings observing district activities as part of a required public health administration course. Senior medical students spent two mornings a week in district clinics. Students were introduced to public health work by the case study approach—problem-solving by addressing specific health or administrative issues. Medical students received patient assignments and visited homes accompanied by a public health nurse, sometimes also seeing the patient at school, at work, or in a clinic.

Local secondary school pupils also visited clinics as part of their "civic experience" program, to observe public health in action. On request, the district health officer lectured in local schools on subjects such as venereal disease, tuberculosis, and family life.



Figure 5. The site of the new Eastern Health District building on Caroline Street, circa 1954—with the Hopkins dome in the background. (Baltimore City Health Department.)

Clinic services

In the post-war years, child health clinics were organized at five localities—on the principle that every mother should have a clinic within walking distance. The clinics provided physical examinations, counseling, and preventive inoculations; children needing specialist care were referred to area hospitals. The clinics provided free smallpox vaccinations and inoculation of triple antigen for diphtheria, whooping cough, and tetanus; they distributed health education pamphlets on infant care, child health, and lead poisoning.[44]

Beginning in 1948, the health department also financed medical care for indigent patients on welfare. Under the Baltimore Medical Care Program, it gave private physicians a capitation fee of $7 per annum for each eligible patient registered.[45] This entitled patients to receive home and office care from the physician of their choice, provided the doctor agreed to the arrangement.

In the 1940s, TB clinics gave several thousand x-rays each year in the search for active TB cases. High school students received free x-rays as part of their civic awareness orientation to public health. Those at high risk of TB infection, such as health workers, were given BCG (bacille Calmette-Guérin) vaccine. As soon as streptomycin became available for TB treatment, the district pioneered its use in home treatment.

Clinic services performed a two-fold purpose: care for the community and data collection for researchers. The weekly clinic offering free serological screening tests for syphilis provided data for ongoing syphilis research. The child health clinics provided data for family and child health studies, while the TB clinics provided fodder for epidemiological investigations. Research and clinical services thus supported and informed each other.

The principles of informed consent did not always govern district research, but there is little in the records to suggest that community members rejected the services offered or resented researchers' constant probing. There was, to be sure, some minor controversy over the health officer's school lectures on sex education.[46] Some parents were also indignant that their children were being tested and questioned about VD; but on the whole, even these issues seem to have generated little protest. One is left with the impression that most people were pleased with the array of services available and were patient with researchers whose questionnaires sometimes required respondents to reveal the most intimate details of their family and personal lives. We can also conclude that much of the research had clear and direct benefits for those involved: streptomycin really was effective against TB, and penicillin was indeed miraculous in treating syphilis and other infections.

A new infant formula

Also tested in the district was a canned baby food consisting of evaporated milk fortified with all essential vitamins and minerals that was formulated according to a recipe developed by Elmer V. McCollum of the school of public health and Wilson L. Grubb of the Johns Hopkins Hospital. At the time, many mothers were bringing babies suffering from rickets, scurvy, and other nutritional deficiencies to the clinics. Most had been fed for some time on artificial baby foods, canned milk, and infant formulas. McCollum, discoverer of vitamins A and D, developed a formula that was tested by the Baltimore City Health Department and the Baby's Milk Fund Association, tried out in the Harriet Lane Home for Orphans, and fed to approximately 100 Baltimore infants. Edwards A. Park of the Johns Hopkins Department of Pediatrics examined the children, found they had done "unusually well," and declared the food nutritionally healthy. The new canned milk was produced by the National Dairy Products Research Laboratory under the name "Formulac." Formulac was not patented in the hope that all major milk-processing companies would produce it and make it available to large numbers of children.[47]

Squabbles within the family

The last complete health and population census of the Eastern Health District was taken in 1947. In 1949, the



Figure 6. Waiting for the polio vaccine, lines form at the new Eastern Health District building in 1956. (Baltimore City Health Department.)

Rockefeller Foundation, responding to reports of an increasingly stormy relationship between health department staff and Hopkins faculty, terminated its direct financial support for the project. By this time, Huntington Williams had made clear his feeling that the school of public health had too much influence in the district. Williams later described his disagreements with the school as "squabbles within the family" that were resolved with the expenditure of much "blood, sweat, and tears." [48]

The most serious struggle came over the location of a new building for the Eastern Health District. Williams insisted that the building be erected at least four blocks away from the school of public health—the minimum distance he thought necessary to guarantee its autonomy.[49–50] Dean Ernest Stebbins said the Johns Hopkins University was willing to provide land and share building costs, but only if the city agreed to the building being located in the same block as the school of public health as "a really outstanding example of city and university cooperation for the benefit of the citizens of Baltimore." [51]

Williams, however, stuck to his position, and the new building was erected at 620 North Caroline Street (**Figures 5 and 6**)—exactly four blocks from the Johns Hopkins School of Hygiene and Public Health. The building carries symbols of both cooperation and competition—the seal of the university and the seal of the city are sculpted together on the facade (**Figure 7**). Buried within the corner stone in a copper box are historical reports, correspondence, and photographs relating to the district's early history. Inscribed above are names of the great public health leaders, including—perhaps in a gesture of conciliation—two from the school of public health: Wade Hampton Frost and William Henry Welch. The building itself is named for Huntington Williams.

With the new building as a symbol of the distance between the district and the school, the close working relationship earlier nurtured between the school and the health department began to fade. Students made field visits to the Eastern Health District but no longer regularly worked there. Faculty members conducted research only if they had the commissioner of health's specific approval. Lemkau, for example, continued the mental

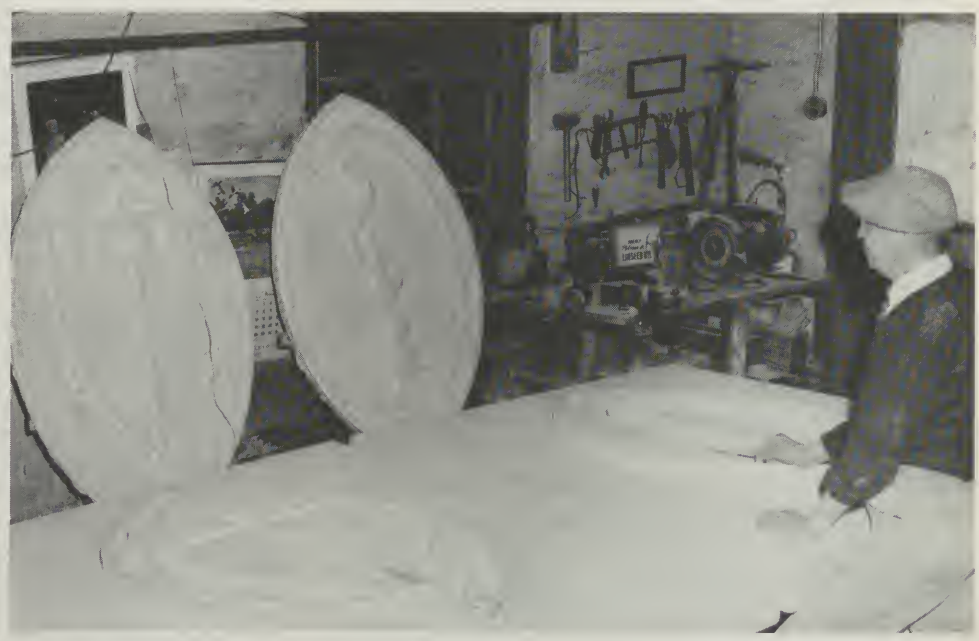


Figure 7. Making the seals for the new Eastern Health District building, January 1954. The two seals represent the Johns Hopkins School of Hygiene and Public Health and the Baltimore City Health Department. (Baltimore City Health Department.)

hygiene program and expanded it to other city areas, but most researchers retreated to their offices to work on statistical data drawn from national population groups; no longer did they collect information by ringing East Baltimore doorbells. East Baltimore's population was left undisturbed by researchers' questions—although residents also lost whatever benefits were to be gained from having their health so closely monitored.

Steps toward a new partnership?

The Eastern Health District was now no longer perceived as a population laboratory for public health research and teaching; it was simply a unit of public health administration within Baltimore. As such, it continued to expand: between 1954 and 1960, its area was enlarged from 2.1 to 24.2 square miles. By 1960, 2 full-time and 72 part-time physicians maintained an array of services, including clinics specializing in prenatal and well-baby care, TB, sexually transmitted disease (STD), chronic disease, and mental health. The district now employed 45 full-time nurses, 15 part-time nurses, and additional student nurses and volunteers to run clinics and make home visits. Specialized vision and audiometric clinics were made available to school children. Fourteen part-time dentists and five dental assistants provided services at the dental clinic and in local elementary schools.

Demographically, the area experienced major changes. Population shifts started during World War II and continued in the fifties, sixties, and seventies. Reflecting a national trend, younger and more prosperous families migrated into suburban areas; young African-American families moved into the neighborhood.[52] Older and poorer whites stayed behind, leaving an elderly white and a youthful African-American population; gradually, the area was reestablished as an essentially African-American neighborhood. In general, district residents were those who had been left behind in the suburban exodus because they could not afford to purchase housing elsewhere. Their health needs were similar to those of poor inner city populations across the country. These needs were at least partially addressed by federal and local programs in the 1960s and early 1970s but were to be generally neglected in the years of Republican administrations.

City health departments everywhere suffered from federal cutbacks in public health funding. In 1975, Dr. John DeHoff, then Baltimore's commissioner of health, saw the budget crisis coming and suggested to John Hume, then dean of the Johns Hopkins School of Hygiene and Public Health, that the school take over the entire Eastern Health District, including the building on Caroline Street, and use it as a student training site.[53] Hume was enthusiastic about the idea but—perhaps because the school of public health was suffering from its own budgetary problems—the suggestion was never taken up and a promising opportunity to marry the academic world of public health research and education with the practical world of public health service to the community was lost.

In recent years, relationships between the Johns Hopkins Medical Institutions and the Eastern Health District have been reestablished. The Eastern Health District's STD Clinic, part of the city's STD/HIV (human immunodeficiency syndrome) Prevention Training Center, is funded by the CDC and is again a national resource for training specialists in STD control. Many center faculty are from Hopkins; Hopkins faculty and clinical staff also provide medical services and conduct research in the clinics through an arrangement interlocking health department treatment and prevention grants with Hopkins research grants. For the past several years, the Eastern Health District has provided space and facilities for the Hopkins-run Alive study, which follows a cohort of 3,000 injection drug users, monitoring them for HIV and TB infection.[54–55] Within the last year, a new collaborative agreement between Hopkins and the district has supplied medical care and made available opportunities for teaching and for research on the growing TB problem and the new drug-resistant TB strains.[56] The district accepts preventive medicine residents and provides a context through which students can gain practical experience in a public health setting.

These new collaborative activities are not yet a match for the explosion of research and services produced in the Eastern Health District in the 1930s and 1940s, but they provide a basis for building a stronger and more extensive cooperative relationship between the Johns Hopkins School of Hygiene and Public Health and the Baltimore City Health Department. Perhaps the 200th anniversary of the Baltimore City Health Department, by offering a chance to reflect on this historical experience, can provide some ideas and inspiration as to new ways of working together to benefit the public's health.

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Baltimore fluoridates

H. Berton McCauley, D.D.S.

ABSTRACT: *In all the history of human progress, there is no measure for the advancement or protection of the public health more effective at lesser cost than fluoridation of domestic water supplies for the control of tooth decay, the adjustment of the concentration of a substance naturally present in water to a level found to be optimal for dental health. This is the story of its adoption in a city of nearly one million people.*

Dr. McCauley is the retired director (1949-1975) of the Baltimore City Health Department Bureau of Dental Care.

The newsprint was hardly dry when the mayor of Baltimore requested the Baltimore City Health Department and the Bureau of Water Supply to provide information on the feasibility of adding fluoride to the city's water. The mayor was Thomas D'Alesandro, Jr. His request was received first thing in the week of November 3, 1950. What prompted it was news of a resolution passed by the House of Delegates of the American Dental Association, which had convened in Atlantic City on Saturday, November 2. The resolution recommended the fluoridation of community water supplies "when approved by the local dental society and utilized in accordance with the standards established by the responsible health authority."[1]

On November 14, armed with a positive report from the health department, Mayor D'Alesandro announced that "adoption of a plan to retard tooth decay among users of city water by adding fluorine compounds to the supply is under consideration."[2] Budget Director Herbert Fallin was asked whether the sum needed could be made available without unbalancing the proposed 1951 budget. It could. At the same time, a Baltimore City Council resolution requested study of the desirability of using fluoride chemicals in the water supply. Two days later, the press reported the mayor had "ordered the addition of fluorine to the city water supply in an attempt to reduce tooth decay among children." Children between birth and eight years of age, when the teeth are formed, would be most benefited; the cost, $55,480 per year; a beginning date, "no later than January."

It was not to be. *The Sun* lost no time editorially suggesting that our mayor, in ordering fluoridation, had "gone off half-cocked." Tests in other parts of the country still had years to run. Had Dr. Huntington Williams, the health commissioner, talked with Mr. Leon Small, the water engineer? What of the position of the local medical and dental societies? Had anyone consulted Dr. Abel Wolman, the renowned sanitary engineering authority of the Johns Hopkins University, or leaders of the dental faculty at the University of Maryland?[3]

The Honorable Thomas D'Alesandro was not intimidated. In a letter to the *Sun's* editor, the mayor promptly retorted it was the editor who had "gone off half-cocked," reminding him of an Associated Press dispatch dated October 27 that stated, "The [US] Public Health Service said today it has definitely been shown that sodium fluoride, added to the public water supply, will 'substantially reduce' dental decay in children." The mayor pointed out that 36 municipalities were fluoridating their supplies as a routine practice. Also, the city's water engineer, Leon Small, an employee of the Department of Public Works headed by Mr. Paul L. Hollan, had been kept fully apprised of fluoridation plans. The US Public Health Service and the American Dental Association provided sufficient evidence of professional approval. Further, the editor had deliberately ignored a November 6 letter to the mayor from the director of the Bureau of Dental Care:

> As indicated in the attached report of the commissioner of health entitled "Dental Aspects of the Addition of Fluoride to the Public Water Supply," there is good reason to anticipate a reduction of at least 50% in tooth decay at any age among persons who continuously receive water containing one part in a million of fluorine as fluoride while the teeth are being formed; that is, between birth and the eighth year of age. Such a reduction in dental disease among the people of Baltimore would be reflected in greatly improved teeth, health, and appearance for tomorrow's citizens, and a very substantial decrease in the presently staggering total of our population's unmet dental needs....We hope this is the information you want and that you will consider it to the advantage of the people of Baltimore to apply this most promising measure against tooth disease....

And a quotation from Enslow:

> If the process proves worthy of adoption sometime hence, a community denied fluoridation during any period of "watchful waiting" will have lost the value of the treatment for such period. Neither is it pleasant to contemplate that such loss in tooth protection amongst the youngsters cannot be made up through subsequent water treatment.

Informing the citizenry

During the last two months of 1950 and well into 1951, the news media carried many items, editorials, letters to the editor, and testimonials on fluoridation, most of which were decidedly positive, some cautious, a very few frankly opposed. Favorable resolutions and policy statements appeared from the American Public Health Association, November 1; the Baltimore City Dental Society, November 20; the Faculty Council of the Baltimore College of Dental Surgery at the University of Maryland, November 21; the Medical and Chirurgical Faculty of the State of Maryland (Med Chi), November 22; the Maryland State Board of Health at its November meeting; and the Council on Dental Health of the Maryland State Dental Association, December 11. The dean of the dental school at the University of Maryland, Dr. J. Ben Robinson, and Dr. Myron S. Aisenberg, a professor of pathology, not only urged adoption but provided scientific information that did much to allay the fears of people who supposed all sorts of ill effects from putting "rat poison" and "insecticide" in the drinking water.

> With the one part in a million ration planned here, it would take 1,000 gallons of water—at one time—to be lethal....The amount of fluorine that remains in the system is not cumulative to the extent of four grams (the lethal dose).... Animals and fish, dogs, cats, and goldfish, even rats and mice, suffer no ill effects.... Studies of the use of the chemical in test cities over a period of years [yield] no evidence of harmful effects on the bone structure, eyesight, or other bodily development.... A test in New York state has shown a [significant] reduction in decay in a [fluoridated] city....The results should be even better as more time passes.

There was a wealth of supporting information to draw upon, practically nothing but imaginary supposition against it. Controlled programs of experimental fluoridation at the one part per million level in Grand Rapids, Michigan; Newburgh, New York; Brantford, Ontario; Marshall, Texas; Sheboygan, Wisconsin; and Evanston, Illinois, had provided consistent and convincing evidence of effectiveness without harm to the population. Also, there were several hundred thousand persons who had been living for generations where the water naturally contained fluoride in appreciably higher concentrations, in whom toxic manifestations had never been encountered. The Bureau of Dental Care's director lost no opportunity to expand and clarify the anticipated benefits of adoption, responding to numerous and persistent inquiries, largely referred by the mayor or the health commissioner, from individuals, groups, and public media interested in various aspects of fluoridation procedure, effects, or safety. According to the *Sun*, "no one appeared to oppose the use of the chemical in the water supply" at a public hearing of the Baltimore City Council conducted November 27 "because of reports of opposition."

Health Commissioner Williams was beset with recommendations to go along with the mayor and proceed with the plan, beginning with urgings from the health department's Dental Advisory Committee, composed of Dr. George M. Anderson, professor of orthodontics, University of Maryland, and member of the Maryland State Board of Health; Dr. M. Edward Coberth, professor of pediatric dentistry; and Dr. Edward D. Stone, Jr., dentist for the Maryland Casualty Company. The committee met with the health commissioner and dental care director November 20, 1950, leaving no doubt of the desirability of fluoridating the water supply. The effect was heightened by an impressive and rapidly accumulating body of positive data and

widespread interest in such a strikingly preventive measure, which, as early as May 1949, had moved the American Water Works Association to establish policy and procedure guidelines for adding fluoride to public water supplies.[4] To determine possible objection from the commercial community, the health commissioner turned to the Baltimore Association of Commerce. The result was a survey of 16 major companies with diversified products in the chemical, porcelain enamel and frit, drug, soap, electrical insulation, food, beverage, and plating industries, including large users of water for steam generation. No barrier was elicited.

Waiting to see

Nevertheless, the first six months of 1951 passed without definitive progress. The health department's report to the mayor had mentioned that "the data, however promising, are not complete and at least another year of study will be required to demonstrate adequately the anti-decay effect of the fluoride added to the Grand Rapids water supply," referring to the US Public Health Service fluoridation study project begun in January 1945.[5] The Bureau of Water Supply was prepared to proceed. Mr. Edward S. Hopkins, the filtration engineer, had surveyed fluoridation procedures as practiced in Wisconsin, Michigan, and Illinois, and decided that hydrofluosilicic acid (H_2SiF_6) was the best fluoride source for Baltimore. Unlike sodium fluoride and sodium fluosilicate, both commonly employed at the time, fluosilicic acid was relatively cheap and was a liquid. It did not have to be subjected to the onerous process of being dissolved in water before being introduced into the water supply. It was available locally from the Baugh Chemical Company and the Davison Chemical Corporation. And, it could be economically stored and controlled in the process of fluoridation. According to the water engineer, however, chemical and equipment could be delayed for months in the prevailing war situation.

On June 29, 1951, Baltimore newspapers published a letter to Mayor D'Alesandro from Surgeon General Leonard A. Scheele, M.D.: "It is my view that the City of Baltimore can no longer afford to postpone fluoridation of the drinking water supply." The process had been approved by every creditable organization in the fields of dentistry and public health. Yet, on the same date, the mayor received a communication from Health Commissioner Williams:

> While in general the reports of experience in other communities are favorable....Baltimore should not take this step in the immediate future....There remains some considerable doubt in the minds of leading medical and sanitary authorities on the question of possible toxicity of a cumulative nature for adults.

The commissioner recommended postponement pending a report expected before the end of the year from the National Research Council's ad hoc Committee on Fluoridation of Water Supplies. Williams was the only one to counsel delay among the medical and dental authorities consulted by the mayor, including the Maryland State Department of Health, Med Chi, and the University of Maryland. No city with more than 173,000 population had yet adopted the measure.

Assuring safety

The awaited National Research Council report was noted as a special dispatch to the *Evening Sun*, November 29, 1951:

> Fluoridation of public drinking water to reduce tooth decay as called for by a $90,000 plan in Baltimore is safe and practicable, according to a report by a special committee of the National Research Council.

A follow-up editorial expanded the findings:

> The committee reports that children in communities where there are small amounts (one part per million) of a fluoride in the drinking water have from one-third to one-half as much tooth decay as children exposed to fluorine-free water. The increased resistance to decay, the committee found, carries into adult life to an "appreciable degree." The fluoride can be added to fluorine-free water supplies with the same beneficial effects and, if handled wisely, should not have harmful effects on the human system.

The reporting committee was headed by Dr. Kenneth F. Maxcy, professor of epidemiology at the Johns Hopkins School of Hygiene and Public Health. Among its 10 members were Dr. A. McGehee Harvey, professor of medicine, and Dr. Abel Wolman, professor of sanitary engineering—both from the same prestigious university. The commissioner of health was satisfied. On November 30, he communicated the entire report to the mayor, with comment:

> This report, which is very satisfactory, has just reached me during the past half-hour, and I feel sure that now it will be well, on the basis of these findings, for Baltimore City to move forward with the plan you have sponsored so actively to take this important public health step.

Before the day's end, Mayor D'Alesandro requested authority from the Maryland State Board of Health to add fluoride to the city's water supply.

While the Bureau of Water Supply was finalizing preparations, a dispatch from Philadelphia appeared in Baltimore papers. The date was December 29, 1951; the headline, "Fluorine Use Called Risk." Dr. Robert S. Harris of the Massachusetts Institute of Technology had decided "much is still unknown about the long-time effects of small amounts taken every day." Fluoridation was "a calculated risk." To make matters worse, a US House of Representatives committee became involved in the debate, adding to the confusion.[6] On February 25, 1952, a resolution appeared before the Baltimore City Council (No. 506). Citing disagreement among scientists and claims of harm to persons suffering from rheumatism and arthritis, the commissioner of health and the water engineer were requested to provide "whatever information is available on this treatment by fluoridation of city water supplies."

Dr. Huntington Williams and Mr. Joseph S. Strohmeyer, who had succeeded Mr. Leon Small in the post of water engineer, appeared before the Baltimore City Council's health

committee in an open hearing conducted March 3. The commissioner presented a prepared statement.[7,8] This and a second hearing four days later were dominated by about 80 highly vocal and determined opponents who vehemently berated fluoridation as an insidious socialistic plot to use a rat poison and an insecticide to perpetrate every imaginable bodily injury upon the populace—"mass medication," "a fifth column," "pagan," "unconstitutional." Dentists obviously had a vested interest in the chemical industry. In rebuttal, reason and truth were patiently projected into the proceedings by Commissioner Williams and Dr. Myron S. Aisenberg, professor of pathology from the University of Maryland dental school. Copies of the National Research Council report and a health department issue of *Fluoridation Questions and Answers* were distributed to interested attendees.

Surmounting the opposition

Ignoring an October 1951 request from the Coordinating Council of the Baltimore Public School Parent-Teacher Organizations for "immediate action on the fluoridation of the public water supply of Baltimore City" and the December 1951 endorsement of the principle of fluoridation by the American Medical Association, opposition members of the Baltimore City Council persisted with yet another resolution, No. 533, introduced March 10, 1952. Citing "uncertainty as to the wisdom of placing fluoride in the water supply," the commissioner of health and the water engineer were "requested to delay the fluoridation....until additional information has been secured....to determine whether it is a wise step to take...."

On March 19, the Baltimore City Council's health committee conducted its third hearing in less than two weeks. Physicians and dentists in opposition to the plan were especially invited. None had appeared before, and none did at this hearing. Instead, an impressive array of health professionals and authorities in defense of the measure were heard, among them were Dr. A. McGehee Harvey, who had participated in the National Research Council study; Dr. Francis A. Arnold, Jr., deputy director of the National Institute of Dental Research (NIDR) and veteran of numerous Public Health Service studies of the effects of fluoride-bearing waters; Dr. Isidore Zipkin, an NIDR biochemist; Dr. Robert H. Riley, director of the Maryland State Department of Health; and Dr. Dean Roberts, his deputy.

Four days later, Baltimore City Council Resolution No. 533 was defeated by a vote of 17 to 4. A March 26 editorial aptly commented:

> The contest, in short, has been decided, and it turned out to be no contest. That being so, there is no legitimate reason to postpone the use of fluorine.

However, there was. On April 5, the Bureau of Water Supply was reported to be delaying the procedure for want of rubber-lined 5,640-gallon tanks in which to store the hydrofluosilicic acid. Coincidentally, two taxpayers, Ian Ross MacFarlane, a radio personality, and one Harry C. Hoffman, had filed a complaint in court: the "introduction of fluorine into the water supply would be prejudicial to health, to religious rights, and to other rights guaranteed by the Constitution of the State of Maryland." The mayor, the Baltimore City Council, the health commissioner, and the water engineer were named as defendants. Again, it was wait and see.

While waiting, the Maryland State Dental Association convened in Baltimore and was addressed on May 26, 1952, by two recognized experts in regard to the effects of fluoride ingestion and exposure: Dr. Harold C. Hodge, professor of pharmacology and toxicology at the University of Rochester, and Dr. Reidar F. Sognnaes, associate dean of the Harvard Dental School. The press was interested. Pertinent questions were answered. There was "absolutely no basis" for rumored complaints of fluoride-caused arthritis, rheumatism, high blood pressure, or kidney or bone disease. On the other hand, there was plenty of need for fluoridation.

The MacFarlane-Hoffman injunction suit was heard by Judge Michael J. Manley of the Circuit Court of Baltimore City during November 6 and 7, 1952. As in the case of the three Baltimore City Council hearings the preceding March, recognized authorities testified against allegation of harm. Again, NIDR sent Drs. Arnold and Zipkin to the defense, and the University of Maryland sent its professor of general and oral pathology, Dr. Aisenberg. The Maryland State Department of Health was again represented by its director, Dr. Riley, this time with Dr. Perry S. Prather as deputy. Other important witnesses included Dr. Alan M. Chesney, dean of the Johns Hopkins School of Medicine and president of Med Chi; Dr. Maurice C. Pincoffs, professor of medicine at the University of Maryland and member of the Maryland State Board of Health; Dr. J. Roy Doty, secretary of the ADA's Council on Dental Therapeutics; Dr. Huntington Williams; and Mr. Joseph S. Strohmeyer. Mr. Harry C. Hoffman, a Christian Scientist, alone defended his complaint; at no time did Mr. Ian Ross MacFarlane appear in the court room. On November 12, Judge Manley dismissed the complaint, charging court costs to the plaintiffs.[9] Assistant City Solicitor F. Clifford Hane had won his case.

Realizing the goal

Two years after Mayor Thomas D'Alesandro, Jr., had ordered it, and two weeks after Judge Michael J. Manley had dismissed the injunction suit, adjustment of the fluoride content of Baltimore's water supply to the optimal level for dental health—one part fluoride to one million parts of water—was finally realized. At 3:00 p.m., Wednesday, November 26, 1952, at the Montebello water treatment plant, the mayor ceremonially pushed the starter button in the presence of the health commissioner; the water engineer; the city solicitor; and representatives of the Maryland State Department of Health, city and

state, medical and dental societies, various municipal agencies, and interested citizen groups (**Figure 1**). He addressed them:

> What we do here today may well be termed by future generations one of the most important events in the history of our city. By adding fluorine to our water, an advance strongly recommended both by the dental and medical professions, we begin today to benefit thousands of young children, and in the future hundreds and thousands of boys and girls will be benefited.
>
> Exhaustive tests by the United States Public Health Service have demonstrated conclusively that fluoridation of the drinking water supply will reduce dental decay up to 60%. Thinking in terms of toothaches alone, the benefits to children will be enormous. And fluoridation will have a very beneficial effect on the financial headaches of parents.
>
> Our medical and dental authorities tell us that the addition of fluorine to the drinking water has the direct result of strengthening the enamel which coats our teeth. It is as simple as that. Yet this greatly desired result is attained without any harmful effect on the body.
>
> Proof of this has been demonstrated again and again in communities which have fluorine in their waters naturally and in quantities much larger than we shall add. As a matter of fact, there are several such communities right here in Maryland.
>
> Baltimore, I believe, becomes today the largest city in the world which is fluoridating its water for the benefit of its citizens, and I like to think of what is happening here as a sort of Thanksgiving Day present to the people of Baltimore and to those county residents served by the city water supply system.
>
> We are trying to put Baltimore in the forefront in every way. We want the best health facilities—we want the finest public schools—we want the smoothest streets—and we want the best of everything for the people of Baltimore at the lowest possible cost in taxes.
>
> There was a little opposition—misguided opposition—to fluorine. But the overwhelming majority of our people, the parents of Baltimore who think of the well-being of their children, is solidly behind fluorine. The support of the people and the powerful support of the medical and dental professions have made this day possible.
>
> I believe with all my heart that in the fluoridation of our water we have something wonderful to be thankful for, in addition to all the other blessing we enjoy as American citizens.



Figure 1. Baltimore officials convene in the Montebello water treatment plant on November 26, 1952, to initiate flouridation. From l to r, Thomas N. Biddison, city solicitor; Huntington Williams, M.D., commissioner of health; Joseph Strohmeyer, water engineer; and Mayor Thomas D'Alesandro, Jr.
(Photo courtesy of Baltimore City Health Department, from its 1953 annual report.)

Baltimore in 1952 was a city of 970,000 people, seventh largest in the nation. Its water supply system served another 210,000 people in surrounding counties. The first year (1953), cost of fluoridating the 200 million gallons of water treated daily was $93,300—7.9 cents per person.[10] In 1991, the system served 1.6 million people, the output treated was 260 million gallons daily, and the fluoridation cost was $321,400 or 20 cents per individual.

For this expenditure, the dental health of Baltimore citizens has dramatically improved. Before fluoridation, a school child free of tooth decay was a rarity. Today, fully 50% of the school population has never had a dental cavity, and children who have are less affected—fewer lesions, fewer teeth lost, far less restoration expense. It is estimated that among adults aged 60 or over, wherein one-half were edentulous before fluoridation, this proportion is now one-third.

Because of the two-year delay in carrying out Mayor D'Alesandro's fluoridation order, Baltimore was preceded in the initiation by Indianapolis, Indiana, August 1951; Hagerstown, Maryland, December 1951; Miami, Florida, April 1952; Washington, DC, June 1952; San Francisco, California, August 1952; and Richmond, Virginia, early November 1952.

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Health indicators of substance abuse problems in Baltimore

Jo DeWeese, Ph.D., and Hongji Liu, M.A.

From the Baltimore Substance Abuse Systems, Inc., Baltimore, Maryland, where Dr. DeWeese is former executive director and Ms. Liu is a statistician.

ABSTRACT: *Selected health indicators were examined for which Baltimore-specific data were available, including substance abuse treatment admissions, AIDS (acquired immunodeficiency syndrome) case reports, and drug-related emergency room visits and deaths. All indicators reflected high levels and increasing rates of substance abuse problems in Baltimore. Drugs of choice most likely to result in adverse effects were heroin, cocaine, and alcohol—often in combination. The African-American population in Baltimore is disproportionately affected by substance abuse. Emerging drug use patterns are examined, and health service and policy issues are discussed.*

While the decreasing drug abuse trends as depicted in national surveys in the 1980s were encouraging, they did not reflect the situations in many major metropolitan areas nor in poor central-city populations in particular. Substance abuse is dynamic by nature, constantly shifting in terms of drugs of choice, patterns of use, locations, and demographic characteristics of those involved. Often, substance abuse data are not comparable between sources; the lack of standardization frequently restricts systematic comparisons or meaningful conclusions.

Despite these limitations, analyses of various drug indicators demonstrated that the drug problem is frequently greater in urban areas, and that substance abuse patterns differ from city to city at any given time. Policymakers must use numerous indicators and retrieve data from various sources to examine the nature and extent of alcohol- and drug-related problems. Data on people affected by *negative consequences* of drug abuse may help identify those most *severely affected* by drug abuse, as well as the patterns of use and the drugs most likely to result in adverse effects.

Local data are essential for local policy formulation. Selected health indicators of drug abuse for which Baltimore data are available include

treatment admissions; acquired immunodeficiency syndrome (AIDS) case reporting; and emergency room (ER) visits and deaths related to substance abuse. However, no single entity has monitored routinely all these health indicators or used them to provide information on Baltimore substance abuse trends and patterns.

Demographics. The Baltimore City population has decreased over the last few decades. According to 1990 census data, Baltimore's population is 736,014—15% of the population of Maryland. The majority (59%) of Baltimore residents are African-American, 39% are white, and 2% are other. Forty-seven percent are male and 53% are female. Over half (51%) are between the ages of 25 and 64; of the remainder, 24% are under 18, 11% are between 18 and 24, and 14% are over 64. Baltimore's median annual household income is $24,045—the lowest in the Baltimore metropolitan area. Sixteen percent of city households are dependent on some form of public assistance, compared with 4% in the surrounding metropolitan area. Forty-four percent of Maryland households receiving public assistance are located in Baltimore. Thirty-three percent of Baltimore households have annual incomes below $15,000; 56% of metropolitan area households with an annual income under $15,000 are in the city.

Service structure. Interpretation of substance abuse treatment data requires an understanding of the service structure of the Baltimore substance abuse treatment system. The Maryland Alcohol and Drug Abuse Administration (ADAA) and the Baltimore City Health Department have a memorandum of understanding outlining their roles and responsibilities for administering the Baltimore treatment system. The state certifies programs and approves the sliding scale that publicly funded programs use to charge fees according to an individual's income. Publicly funded substance abuse treatment programs, for purposes of this article, are those that receive federal block grant and state general revenue funding from the Maryland ADAA through the Baltimore City Health Department and, therefore, are required to provide treatment services without regard for a patient's ability to pay. Forty-eight publicly funded treatment programs operate in Baltimore; an additional 13 programs operate with private funds. The health department provides the services directly in 3 of the 48 public programs and contracts with nonprofit organizations for the remaining 45.

Treatment slot static capacity is the number of persons who can receive treatment simultaneously at a given point in time. The static capacity in Baltimore's publicly funded treatment system increased from 4,439 in fiscal year* 1989 (FY89) to 5,392 in FY92 due to reductions in the state's general revenue funding. Treatment slot capacity is not reported by Baltimore's privately funded programs. Of the 5,392 publicly funded slots available in FY92, only 193 residential substance abuse treatment beds were in the city; the remaining 5,199 slots were for outpatient treatment. Of these outpatient slots, about half were in programs providing methadone treatment for patients whose primary drug of abuse was heroin or other opiates; the remaining slots were in programs serving those with problems relating to the abuse of alcohol or any other drug, including opiates, or combinations of substances.

* *Fiscal year for Substance Abuse Management Information System (SAMIS) data is July 1 through June 30, while Baltimore AIDS surveillance and DAWN (Drug Abuse Warning Network) data follow the calendar year.*

Data sources

All Maryland-certified treatment programs for alcohol and other drug abuse are required to report admission and discharge data to the Substance Abuse Management Information System (SAMIS), ADAA, Department of Health and Mental Hygiene (DHMH). While the majority of persons who abuse alcohol or other drugs do not enter the treatment system, data on those admitted provide an excellent information source on the drug problem because they reflect the substantial number of identified abusers with problems severe enough to result in their voluntary or involuntary admission to the treatment system.

Data reported to SAMIS by ADAA-certified Baltimore treatment programs for July 1, 1987, through June 30, 1992 (FY88 through FY92), were analyzed on the Baltimore Substance Abuse Systems, Inc. computer network, using the Statistical Package for Social Sciences (SPSS) software. For SAMIS data, treatment episodes (the time between admission and discharge) are unduplicated, but each treatment episode does not necessarily represent a unique individual patient. Up to three *mentions* (a mention is a substance that is reported as the primary, secondary, or tertiary problem) for each admission may be reported, so the number of mentions exceeds the number of treatment episodes.

Data on AIDS case reports were extracted from the December 31, 1992, *AIDS Statistical Summary,* published monthly by the Baltimore City Health Department.[1] This publication of AIDS surveillance data includes cumulative cases; race, sex, and transmission mode by year of initial diagnosis; case fatality rates; and deaths by half-year and age group. AIDS risk categories reported include: (1) homosexual or bisexual men; (2) injection drug users (IDUs); (3) homosexual or bisexual IDUs; (4) hemophiliacs; (5) heterosexuals with infected partners; (6) recipients of transfusion of blood or blood products; (7) children with a parent at risk or having AIDS/HIV (human immunodeficiency virus)—a vertical mode of transmission in pediatric cases; and (8) none of the above or other. For this article, categories were combined into three groups: (a) homosexual or bisexual men; (b) IDUs including the IDU group 1 above, the homosexual or bisexual IDU group 3 above, and the vertical transmission group 7 above; and (c) all other patient groups including 4,5,6, and 8 above. Since calendar year 1992

data may be revised substantially as additional diagnoses continue to be confirmed, further transmission data were plotted through 1991 only.

Other substance abuse indicators are reported by the Drug Abuse Warning Network (DAWN), which is funded by the National Institute on Drug Abuse (NIDA) with participation from the Drug Enforcement Administration. DAWN data, collected from a sample of hospital ERs and from medical examiners located throughout the United States, pertain only to the substance-abusing population who seek emergency medical treatment or who die in a way that brings the death to the medical examiner's attention. The Baltimore metropolitan area, rather than Baltimore City alone, is among the primary metropolitan statistical areas included in the DAWN system. DAWN data were obtained from published NIDA reports.[2,3] As with treatment program data, the number of DAWN ER episodes is not synonymous with the number of individuals involved in drug abuse. An episode is counted in the DAWN system for each patient who visits a DAWN ER room and mentions drugs in relation to the presenting medical crisis. In contrast, deaths are counted as the number of individuals whose cause of death was directly related to drug abuse as determined by a medical examiner. Up to four substances can be specified for each episode and six substances for each death.

Efforts by NIDA to transform the DAWN system into a national probability sample for ERs at the national and metropolitan levels resulted in a new sample of ERs being used from 1990 forward. Starting with the 1991 annual DAWN report, ER statistics are nationally representative weighted estimates. Trend tables in the 1991 report provide weighted estimates for 1988 through 1992 that can be used in year-to-year comparisons for selected data disaggregations. For Baltimore, procedural changes affected the level of reporting, and the completeness of reporting varied over time for several participating hospitals. These factors influenced the data for several months in 1989 and for 1990. Therefore, while trends data appeared unaffected, the observed increases for the area as a whole might be less if complete data were available from all hospitals and if no procedural changes had occurred.

Results

Treatment availability. The number of persons able to obtain alcohol and drug abuse treatment in Baltimore is dependent, in part, on the number of slots available in appropriate treatment modalities. Lack of sufficient slots limits the number of admissions or persons receiving treatment. In the aggregate, Baltimore's publicly funded treatment programs consistently operate very near to or above static capacity, especially the methadone programs whose average treatment slot utilization rates ranged from 99% to 116% over the five-year period examined (1988–1992). On average, the number of patients in treatment in Baltimore's publicly funded programs on a daily basis tracked the available static slot capacity, increasing from 4,943 in FY89 to 5,130 in FY90 and to 5,328 in FY91, and then decreasing to 5,079 as slot availability decreased in FY92. Approximately one-fifth of substance-abusing patients treated in Baltimore receive services from privately funded programs. Baltimore's treatment capacity in privately funded programs, proportional to slot capacity in publicly funded programs, is substantially less than in the remainder of Maryland; nevertheless, Baltimore's private treatment programs are often not fully utilized because of the predominance of indigent patients seeking services in the city.

As the median duration of substance abuse treatment episodes is often less than one year, the number of patients admitted and treated annually typically exceed the static slot capacity. The number of patients *admitted* to Baltimore treatment programs has steadily increased from 13,502 in FY88 to 16,327 in FY92; the number *treated* over the same period increased from 18,793 to 22,234. While Baltimore has only 15% of the Maryland population, Baltimore programs served 37% of Maryland's substance abuse treatment patients in FY92.

Treatment admissions by race. From FY88 through FY92, the number of white patients admitted for treatment in Baltimore steadily declined from 4,280 to 3,411, while the number of African-Americans increased from 9,128 to 12,818. The number of white females remained stable at approximately 1,000 annually. The greatest percentage change was in the number of African-Amercian females admitted, which nearly doubled from 2,264 in FY88 to 4,211 in FY92. Fifty-three percent of the 16,327 patients admitted for treatment in Baltimore in FY92 were African-American males, 26% were African-American females, 14% were white males, 7% were white females, and 1% were other. Thus, African-Americans and males were overrepresented in treatment, and whites and females were underrepresented compared with their proportions in the Baltimore population as a whole.

Treatment admissions by age and education. The age distribution of those admitted in FY92 was generally proportional to the Baltimore population's age distribution; the exception is an overrepresentation of those 18 to 25 years of age and a comparable underrepresentation in the under-18 years of age group, reflecting the usual age of onset of substance abuse. Of the 16,327 patients admitted in FY92, nearly one-fourth were between 26 and 30 years of age, and nearly half were between 31 and 44. Twelve percent completed less than the ninth grade, 35% completed the ninth through eleventh grade, and another 38% graduated from high school. Thirteen percent completed some college, and only 2% graduated from college or beyond. Of the 15,317 admissions who were over age 18 years of age, 46% were unemployed and not seeking employment, 30% were unemployed, 4%

were employed part-time, and 20% were employed full-time.

Most commonly abused drugs. SAMIS records a maximum of three substances mentioned at admission as the primary, secondary, and tertiary drugs of abuse. For FY92, **Figure 1** shows that opiates, usually heroin, were the most frequent primary drugs of abuse, followed by alcohol, cocaine, and marijuana as a distant fourth. Cocaine, including crack, was abused as the primary drug about half as often as heroin, but was the secondary drug of abuse far more often than any other substance, frequently in connection with heroin abuse. Inhalants (ranking fifth) were the primary drug for 43 patients, with every other primary drug being cited even fewer times. The small number of persons with primary inhalant or hallucinogen problems were generally youth, with a mean age of 18. When total substance mentions are examined for FY92 admissions, cocaine, at 9,968, was the most frequently mentioned, followed by opiates at 9,385, alcohol at 8,403, and marijuana at 3,239 mentions—a different ranking of the top four primary drugs abused. All other substances were mentioned fewer than 400 times each.

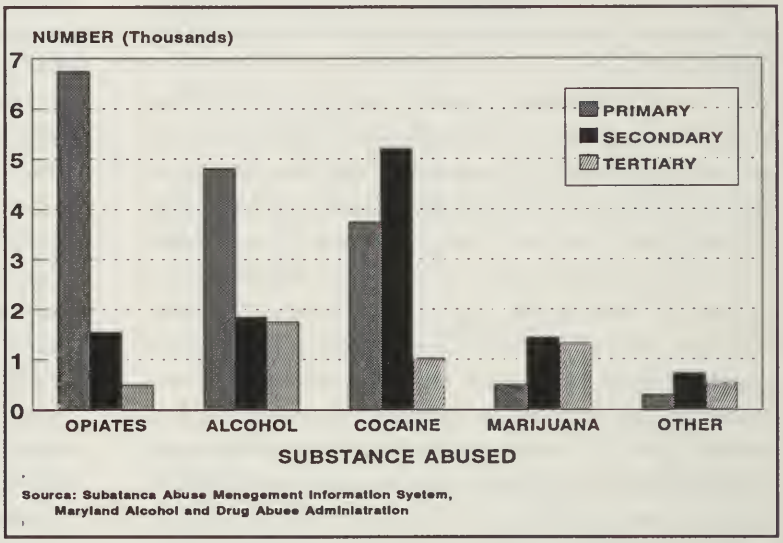


Figure 1. Substances abused by patients admitted to Baltimore treatment programs, fiscal year 1992.

Increasingly, patients mentioned alcohol in combination with other drugs or the use of two or more drugs concurrently. From FY88 to FY92, the percentage of patients admitted who used only alcohol declined by 50%, while the percentage who used two or more drugs increased by 50%. This increasing polydrug abuse was paralleled by an increase in medical problems, HIV infection and AIDS in particular, among substance abusers seeking treatment.

Figure 2 shows that while cocaine mentions increased 83% and heroin mentions increased 64%, the number of alcohol and marijuana mentions did not change significantly for patients admitted from FY88 through FY92. The relative ranking of substances mentioned by adolescents 18 years of age or younger who were admitted to treatment is different than for adults, as shown in **Figure 3**. Adolescents admitted in FY92 were most likely to mention alcohol, followed by marijuana, cocaine, and heroin. From FY88 to FY92, adolescents' substance mentions at treatment admission decreased substantially for marijuana and increased slightly for alcohol, cocaine, and heroin.

Intravenous drug use. IDUs who share injection equipment are of particular concern because of their risk for contracting and transmitting HIV. In FY92, 15,881 IDUs received substance abuse treatment in Maryland. Sixty-two percent of these, or 9,852 persons, were treated in Baltimore. The number of patients admitted to treatment in Baltimore who use an intra-

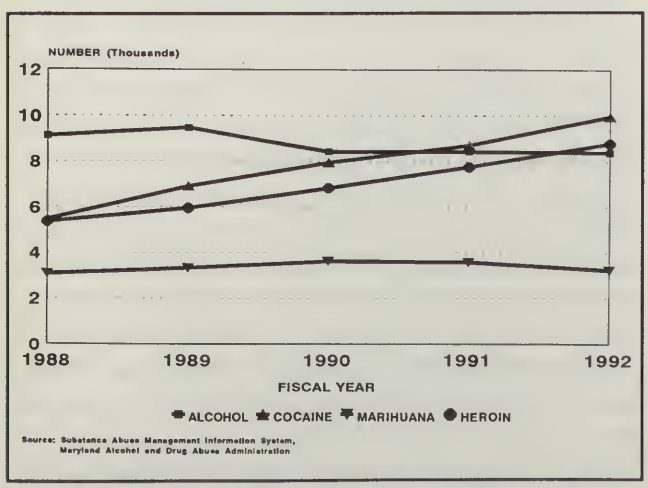


Figure 2. Mentions of selected substances by patients admitted to Baltimore treatment programs, fiscal years 1988-1992.

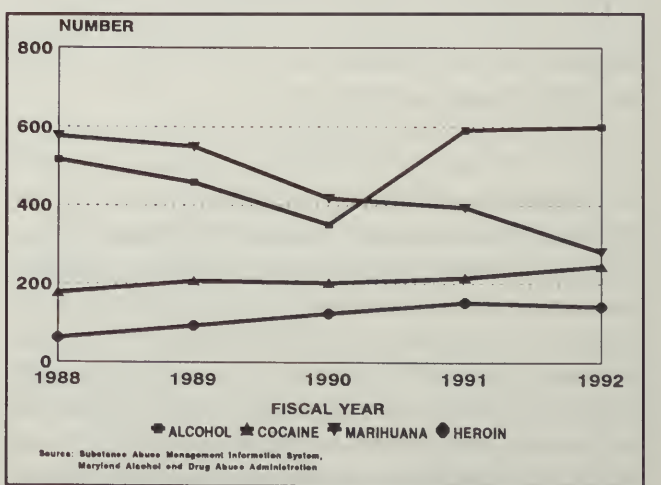


Figure 3. Selected substances mentioned by adolescents admitted to Baltimore treatment programs, fiscal years 1988-1992.

Table 1. Race/gender by age of intravenous drug users admitted to Baltimore treatment programs (FY92)

Race/gender	Under 18		18–20		21–25		26–30		31–40		41–50		Over 50		Total
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#
White male	21	61.8	12	18.8	64	14.7	143	11.8	396	11.4	120	11.1	14	11.3	770
White female	7	20.6	18	28.1	64	14.7	144	11.9	218	6.3	39	3.6	1	0.8	491
African-American male	4	11.8	18	28.1	165	38.0	518	42.7	1,907	55.1	707	65.5	98	79.0	3,417
African-American female	0	0.0	15	23.4	139	32.0	404	33.3	933	26.9	208	19.3	11	8.9	1,710
Other male	1	2.9	0	0.0	1	0.2	3	0.2	8	0.2	3	0.3	0	0.0	16
Other female	1	2.9	1	1.6	1	0.2	2	0.2	1	0.0	0	0.0	0	0.0	6
Total IV drug users	34	0.5	64	1.0	434	6.8	1,214	18.9	3,463	54.0	1,077	16.8	124	1.9	6,410

Source: Substance Abuse Management Information System, Maryland Alcohol and Drug Abuse Administration

venous administration route increased steadily from 5,471 in FY88 to 6,412 in FY92. **Table 1** shows the race and gender by age of IDUs admitted in Baltimore in FY92. Over half were between the ages of 31 and 40; 53% were African-American males; 27% were African-American females; 12% were white males; and 8% were white females. **Table 2** shows the number of mentions (maximum of three per patient) of drugs used intravenously by patients admitted to Baltimore treatment programs from FY88 through FY92. Heroin or other opiates and cocaine were by far the most likely drugs used intravenously, frequently in combination.

Table 3 shows the route of cocaine administration for patients admitted from FY88 through FY92. While the total number of cocaine mentions nearly doubled over this period, the percentage of intravenous administration cocaine mentions decreased from 62% to 46%, and the percentage of mentions for smoking crack increased from 12% to 33%. It is important to note that the *absolute* number of intravenous cocaine mentions increased from 3,406 to 4,539 over the period analyzed, even though the *percentage* decreased. The number of heroin mentions for patients admitted to treatment in Baltimore also increased substantially from 5,353 in FY88 to 8,781 in FY92. Interestingly, a simultaneous decrease in intravenous injection and increase in inhalation were observed, with the intravenous route of administration dropping from 88% in FY88 to 66% in FY92, and the inhalation route of administration increasing from 11% in FY88 to 30% in FY92 (**Table 4**). Those using an inhalation route tended to be younger (**Table 5**) and to enter

Table 2. Mentions of drugs used intravenously by patients admitted to Baltimore treatment programs

Substance mentions	1988		1989		1990		1991		1992	
	#	%	#	%	#	%	#	%	#	%
Heroin	4,697	55.28	4,909	54.17	5,052	54.05	5,422	54.23	5,810	55.22
Non-Rx methadone	19	0.22	45	0.50	17	0.18	22	0.22	7	0.07
Other opiates	316	3.72	234	2.58	159	1.70	147	1.47	119	1.13
Amphetamines	9	0.11	3	0.03	4	0.04	3	0.03	7	0.07
Cocaine	3,406	40.08	3,817	42.12	4,057	43.40	4,343	43.43	4,539	43.14
PCP	7	0.08	5	0.06	3	0.03	1	0.01	2	0.02
Other	43	0.51	49	0.54	55	0.59	61	0.61	38	0.36
Total mentions	8,497		9,062		9,347		9,999		10,522	
Total IV drug users	5,471		5,671		5,691		6,090		6,412	

Source: Substance Abuse Management Information System, Maryland Alcohol and Drug Abuse Administration

Table 3. Route of cocaine administration for patients admitted to Baltimore treatment programs

Route	1988		1989		1990		1991		1992	
	#	%	#	%	#	%	#	%	#	%
Oral/other	33	0.6	68	1.0	81	1.0	66	0.8	119	1.2
Smoking	633	11.6	1,455	21.1	2,090	26.3	2,368	27.2	3,258	32.7
Inhalation	1,368	25.1	1,537	22.3	1,691	21.3	1,891	21.7	2,007	20.1
Intramuscular	21	0.4	27	0.4	29	0.4	38	0.4	46	0.5
Intravenous	3,406	62.4	3,817	55.3	4,057	51.0	4,343	49.9	4,539	45.5
Total mentions	5,461		6,904		7,948		8,706		9,969	

Source: Substance Abuse Management Information System, Maryland Alcohol and Drug Abuse Administration

treatment earlier. For heroin-abusing patients admitted to treatment in FY92, those who used an inhalation route and who had no prior treatment waited 5 years between first heroin use and treatment admission compared with 12 years for those who injected heroin.

HIV and AIDS. Sharing of injection equipment is a major risk factor for HIV and AIDS. For cumulative cases of AIDS from January 1, 1981, through September 30, 1992, 67% of the Maryland cases in which injection drug use was a risk category were Baltimore residents. Of the various risk categories, injection drug use was a factor in half the 2,490 adult or adolescent cumulative cases and in 88 of 95 pediatric cases among Baltimore residents through December 31, 1992; homosexual or bisexual men who were not IDUs comprised an additional 934 cases or 38% of the total. Of the 2,490 adult and adolescent cases, 1,996 were men and 494 were women. At the time of initial diagnosis, 95 cases were age 12 or under, 11 were 13 to 19 years of age, 468 were 20 to 29, 1,166 were 30 to 39, 622 were 40 to 49, and 223 were over 49. Eighty percent were African-American, and 19% were white.

Figure 4 shows that the three aggregated IDU risk categories surpassed homosexuality or bisexuality alone as the most common transmission mode for new AIDS cases among Baltimore residents in 1989 (229 cases and 150 cases, respectively). **Figure 4** also shows an increasing trend for IDU-related AIDS transmission through 1991 when 303 IDU-related Baltimore AIDS cases were reported. Injection drug use is a risk factor for most new AIDS cases in Baltimore.

African-Americans in Baltimore have been disproportionately affected by AIDS relative to their percentage representation in the population (80% of cumulative AIDS cases through December 31, 1992, compared with 59% of the Baltimore

Table 4. Route of heroin administration for patients admitted to Baltimore substance treatment programs

Route	1988		1989		1990		1991		1992	
	#	%	#	%	#	%	#	%	#	%
Oral/other	19	0.4	36	0.6	67	1.0	56	0.7	86	1.0
Smoking	26	.05	64	1.1	91	1.3	106	1.4	224	2.6
Inhalation	578	10.8	914	15.4	1,572	23.0	2,121	27.3	2,595	29.6
Intramuscular	33	0.6	26	0.4	49	0.7	51	0.7	66	0.8
Intravenous	4,697	87.7	4,909	82.5	5,052	74.0	5,422	69.9	5,810	66.2
Total mentions	5,353		5,949		6,831		7,756		8,781	

Source: Substance Abuse Management Information System, Maryland Alcohol and Drug Abuse Administration

Table 5. Age at admission with heroin as primary drug mentioned by route of administration

Route	Under 18	18-20	21-25	26-30	31-40	41-50	51-60	Total
Injection	26	175	1,562	4,417	11,002	2,703	340	20,225
Inhalation	376	728	1,651	1,262	1,172	168	50	5,407
Oral	15	14	20	31	64	23	9	176
Total patients	417	917	3,233	5,710	12,238	2,894	399	25,808

Source: Substance Abuse Management Information System, Maryland Alcohol and Drug Abuse Administration

population). This overrepresentation has been even greater for new IDU-related AIDS cases; for cases diagnosed in 1991, 62% were African-Amercian males, 24% were African-American females, 12% were white males, and 1% were white females. The increasing trend for African-American females to be affected is of particular concern, in part because of transmission risk during pregnancy. For IDU-related cases diagnosed from 1988 through 1991, the percentage of new female African-American cases increased from 24% (35) to 30% (90).

Drug abuse episodes in ERs. Additional health indicators from the DAWN system have been analyzed to further define the nature and extent of Baltimore's substance abuse problem. When weighted ER-episode estimates in Baltimore are examined for 1988 through 1991, the number of drug abuse episodes increased from 4,858 in 1988, to 4,781 in 1989, to 6,222 in 1990, and to 10,902 in 1991. Of the DAWN metropolitan areas reporting, Baltimore had the largest percentage increase in drug abuse–related ER episodes from 1990 to 1991 (74%); the ER episode increase from 1990 to 1991 for the total coterminous United States was 8%. Increases in Baltimore ER episodes were similar for males (75%) and females (74%). Episodes involving African-American patients increased 88%, and those involving white patients increased 44%. Drug-related ER episodes increased 92% for patients 35 years of age or older, 82% for those 26 to 34 years old, and 50% for those 18 to 25 years old.

According to 1991 DAWN data for the Baltimore metropolitan area, cocaine is mentioned more frequently in ER episodes (6,687) than any other drug, followed by heroin (3,892), alcohol in combination with other drugs (3,115), and marijuana (355). Mentions in ERs for all four substances increased from 1988 through 1991, showing the largest percentage increases from 1990 to 1991 (**Figure 5**).

Baltimore ER mentions of cocaine increased 121% from 3,023 in 1990 to 6,689 in 1991—the second largest increase of the 21 DAWN metropolitan areas. Increases were observed in 15 of 21 metropolitan areas, with no metropolitan area showing a statistically significant decrease in cocaine mentions from 1990 to 1991. In the United States, weighted estimates of cocaine mentions increased 28% from 80,355 in 1990 to 102,727 in 1991.

Heroin ER mentions also increased in the United States from 1990 to 1991; weighted estimates changed 8% from 33,884 to 36,576. The number of heroin ER mentions in Baltimore increased 134% from 1,667 in 1990 to 3,892 in 1991—the greatest increase in the United States. Additionally, alcohol-in-combination mentions increased 69% and marijuana men-

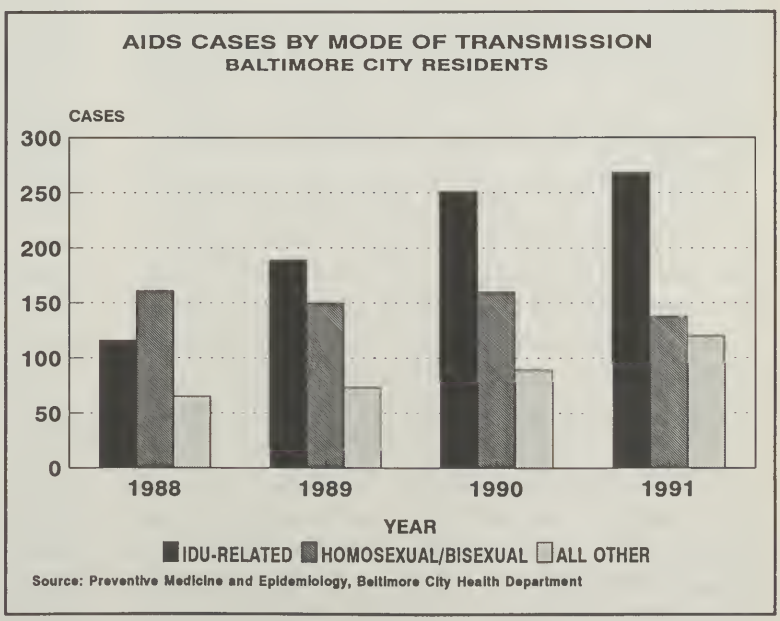


Figure 4. AIDS cases by mode of transmission, Baltimore residents, 1988-1991.

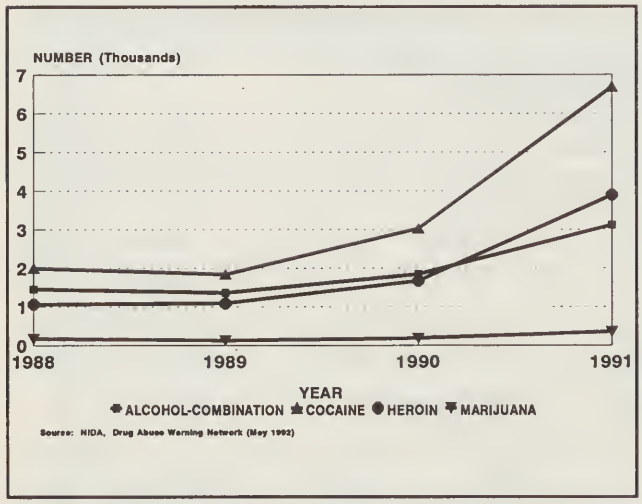


Figure 5. Number of substance-related ER mentions in the Baltimore metropolitan area, 1988-1992.

tions increased 91% from 1990 to 1991 in the Baltimore metropolitan area.

Not only are the large percentage increases in ER episodes and in various drug mentions from 1990 to 1991 within the Baltimore metropolitan area noteworthy, but the number of ER episodes and drug mentions are substantial when compared with other cities and the entire United States. Rates per 100,000 population for those age six or older were computed for weighted estimates of ER episodes and drug mentions. The number of drug-related ER episodes per 100,000 US population in 1991 was 179; San Francisco had the highest total of the 21 metropolitan areas at 831, followed by Newark at 538, New Orleans at 533, and Baltimore at 500. More significantly, Baltimore ranked second of all 21 metropolitan areas in 1991 for cocaine-related ER mentions and second for heroin-related ER mentions per 100,000 population. Cocaine mentions per 100,000 population for the United States were 45; New Orleans was highest at 323, and Baltimore followed at 310. US heroin mentions per 100,000 population were 16, Seattle reported 223, and Baltimore 180.

Drug-related deaths. Baltimore had the eighth highest rate (57) of drug-related deaths per thousand deaths in 1991—higher than the DAWN average of 45 per thousand. Drug-related deaths increased 10% across the 27 DAWN metropolitan areas from 1990 to 1991, with some cities showing increases and others decreases. Of all DAWN areas, Baltimore had the largest increase in drug-related deaths (177%) from 1990 to 1991. The increase in deaths was approximately equal between males (176%) and females (181%). Drug-related deaths of African-Amercians increased 262%, and deaths of whites increased 106%. Deaths of persons 18 to 25 years of age increased 133%, deaths of persons 26 to 34 years of age increased 250%, and deaths of those over 34 increased 142%.

Heroin-related deaths increased 16% across the areas reporting, with the largest increases occurring in Baltimore (268%, from 47 in 1990 to 173 to 1991). Cocaine-related deaths also increased 20% overall from 1990 to 1991, and the greatest increase again occurred in Baltimore (254%, from 35 in 1990 to 124 in 1991). Baltimore deaths involving alcohol in combination with other drugs also increased from 1990 to 1991 (207%, from 41 to 126).

Discussion

Substance abuse is a major problem in Baltimore. Health indicators were compared, and trends and patterns in alcohol and other drug abuse in Baltimore from 1988 to 1992 were analyzed. Adverse health consequences connected to substance abuse, particularly heroin and cocaine use, alone or in combination, continued to increase in Baltimore. Problems related to alcohol or alcohol in combination with other drugs generally ranked third, and problems related to marijuana ranked a distant fourth. Baltimore has one of the largest and most longstanding heroin abuse problems of any major metropolitan area in the United States. The crack epidemic began late in Baltimore relative to other cities, but crack-related problems continue to escalate. Multiple drug use has become increasingly common, as have multiple health and social problems in persons seeking substance abuse treatment.

Data analyses show, in general, that (1) increasing numbers of persons were admitted to treatment in Baltimore from FY88 through FY92; (2) the four leading drugs abused by persons admitted to treatment were heroin, cocaine, alcohol, and marijuana—the order of the first three changed depending on the analysis, and marijuana ranked a distinct fourth except for adolescents in treatment; and (3) the number of patients admitted to treatment for alcohol and for marijuana abuse remained relatively stable from FY88 through FY92, while the number mentioning cocaine and heroin increased steadily over the same period.

Several factors limit the extrapolation of substance abuse treatment system data for policy development purposes. One is the lack of enough Baltimore treatment slots to allow treatment on demand. The limitations in treatment availability overall and by specific modality limit the number of patients who can be admitted and may bias their profile. Also, those admitted to treatment are a relatively small fraction of substance abusers and, therefore, may not be representative of that population.

Baltimore has only 15% of the Maryland population, but about one-third of the persons admitted to substance abuse treatment in the state and about two-thirds of the state's IDUs in treatment. The nature and extent of injection drug use are critical concerns because sharing injection equipment is a major mode of HIV transmission. Many younger and less-experienced users in Baltimore are reporting inhalation rather than injection as the route of heroin administration. Whereas 11% of those mentioning heroin when admitted to treatment in FY88 used inhalation as the administration route, 30% of those

admitted in FY92 inhaled heroin rather than injected it. While this is positive in terms of helping to prevent HIV infection, there are still significant numbers of persons injecting drugs. Only a fraction of IDUs receive substance abuse treatment, partially as a result of the inadequate number of treatment slots. Failure to treat the addict population will result in far more costly health and social service outlays in the future.

Substance abuse treatment system data and AIDS surveillance data indicate that problems related to injection of heroin and cocaine, separately or in combination, continue to increase in Baltimore at an alarming rate. A paramount issue is the risk of HIV infection associated with sharing injection equipment and the subsequent transmission of the virus through drug or sex practices. HIV infection and AIDS have major negative effects on the health of infected individuals, substantially increase the costs of their health care, and have a heavy impact on the functioning of health care services in locations with high incidence rates. The average direct lifetime medical costs for each adult with HIV infection is between $60,000 and $100,000, while indirect costs due to lost productivity are six times as high.[4,5]

IDUs experience an exceptionally high risk of seroconversion from HIV infection. Annual infection incidence rates as high as 9% have been reported,[6–9] but seroconversion rates are lower in a given area for cohorts receiving methadone-maintenance treatment services.

DAWN data on drug-related ER visits and drug-related deaths corroborate the SAMIS treatment and Baltimore AIDS surveillance data indicating significant substance abuse problems in general and that heroin and cocaine abuse, in particular, disproportionately affect Baltimore's African-American population. Substance abuse problems continue to increase in Baltimore; they do not appear to have peaked as they may have in the remainder of Maryland and the United States. Health care providers and policymakers must recognize the enormity of the challenge substance abuse poses for Baltimore. They need to plan appropriately, especially in light of the limited and frequently decreasing resources available.

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Geographic distribution of AIDS patients diagnosed at eight Baltimore hospitals

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ABSTRACT: *Since the begining of the AIDS (acquired immunodefinciency syndrome) epidemic in Baltimore, the university hospitals, particularly Johns Hopkins, have diagnosed and treated a disproportionate share of Baltimore patients. Many Baltimore community hospitals are now treating AIDS patients. These hospitals will have an increasing role in providing primary and secondary care as the epidemic expands.*

In 1981, the first Baltimore case of acquired immunodeficiency syndrome (AIDS), then known as gay-related immune deficiency (GRID), was diagnosed. At that time, this syndrome's etiology was poorly understood; the etiologic agent had not yet been identified, and little was known about its pathogenesis. Few Baltimore hospitals were prepared to deal with this epidemic's impact.

In 1985, Johns Hopkins Hospital made a commitment to serve as a referral center for AIDS cases in the Baltimore metropolitan area (Anne Arundel County, Baltimore County, Carroll County, Harford County, Howard County, and Queen Anne's County) and beyond. At the end of 1985, the virus causing AIDS had been identified, and a serologic test for infection became available. Up until that time, Johns Hopkins Hospital had been the hospital of diagnosis for 47.6% of the 105 AIDS cases reported by Baltimore health care providers.

By February 1987, the number of AIDS cases reported through 1985 had doubled, and by December 1992, Baltimore health care providers had reported 3,036 cases. As these dramatic increases occurred, more Baltimore hospitals began to diagnose AIDS cases in substantial numbers.

Faced with the rapidly growing epidemic and the need to effectively coordinate the limited resources available to treat AIDS, Mayor Kurt L. Schmoke established the Mayor's AIDS Coordinating Council in 1988 and the Greater Baltimore HIV (human immunodeficiency virus) Health Services

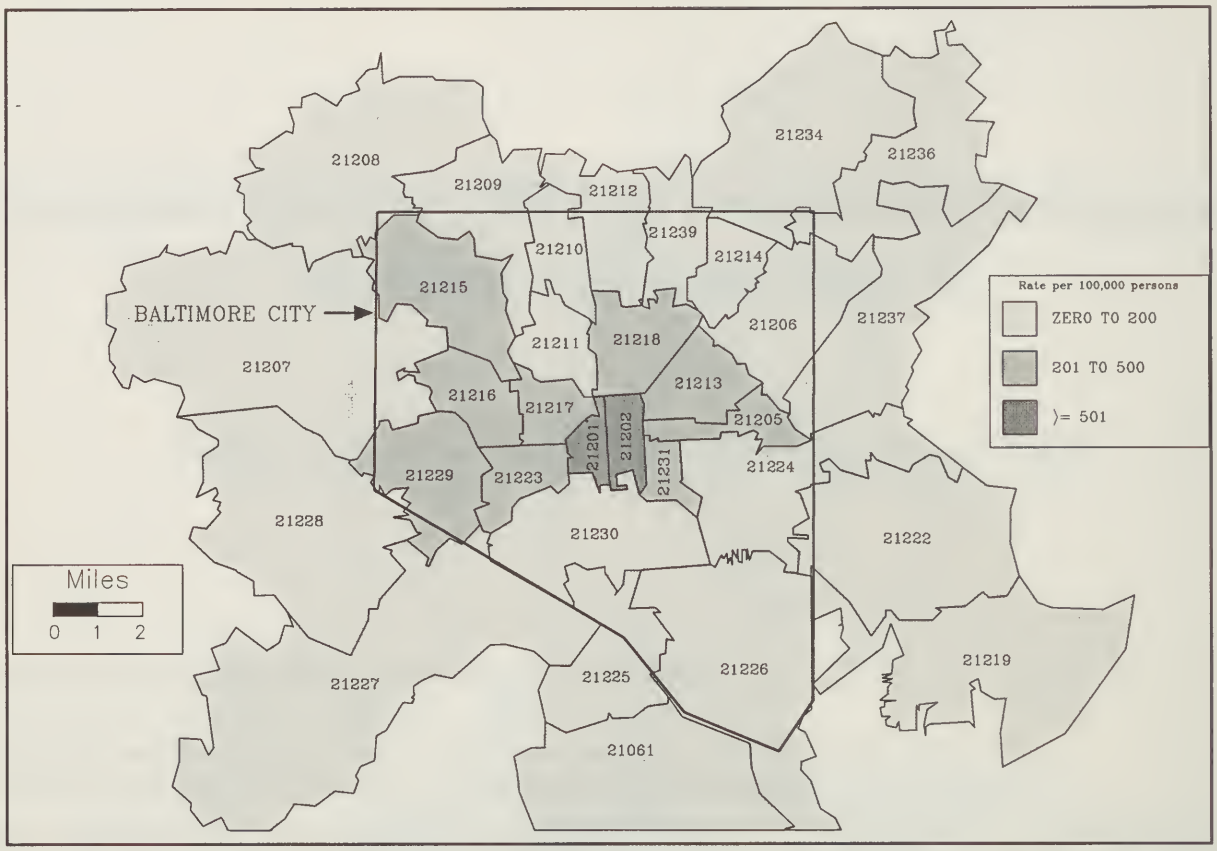


Figure 1. AIDS case rate per 100,000 population by zip code for AIDS cases reported directly to the Baltimore City Health Department.

Planning Council in 1991—the latter having the specific mission of setting priorities for the use of the Ryan White CARE Act, Title I funds. The councils' concern is the large number of HIV-infected persons in Baltimore who have limited access to hospitals and clinics providing primary care. The councils have also focused on the continuum of care for HIV/AIDS patients and have made it a priority to assure a smooth transition for HIV-infected persons from early diagnosis, through early intervention services, and through referrals, specialty consultations, and tertiary care. In 1992, the Health Resources and Services Administration (HRSA) made the assessment of continuum of care and unmet HIV service needs a requirement for receipt of Ryan White Title I funds.[1]

Methods

Maryland medical care providers who diagnose AIDS are required to report to the local (city or county) health department. In addition, Baltimore laboratories that have positive results diagnostic for AIDS-defining conditions (such as pneumocystis carinii pneumonia) must report to the Baltimore City Health Department (BCHD). Zip code of residence was tabulated for patients reported to BCHD. Cumulative incidence rates of AIDS by zip code were calculated using 1990 census figures.[2] Residence and the hospital diagnosing AIDS were counted for all patients diagnosed in Baltimore and reported through December 1992.

Results

Cumulative AIDS incidence per 100,000 population by zip code is shown in **Figure 1** for patients reported to BCHD. Incidence rates vary from zero per 100,000 in zip code 21226 to 929 per 100,000 in zip code 21201. The highest AIDS rates have been in the center of Baltimore and to the north and west of the center.

Of the 3,036 persons with AIDS reported to BCHD through December 1992, 88% were diagnosed in Baltimore's acute care hospitals. The percent distribution of residence of patients diagnosed by eight Baltimore hospitals is shown in **Table 1**, which presents data for the 32 zip codes that are included in or border on Baltimore City.

Johns Hopkins Hospital and the University of Maryland Medical Center are the two major Baltimore referral hospitals. They have been the hospitals of diagnosis for 30.8% and 15%, respectively, of the cumulative case total. They have also diagnosed patients coming from a wide geographic area. Johns Hopkins Hospital, in particular, has diagnosed patients whose residence closely parallels the incidence rates seen in **Figure 1**. Six community hospitals diagnosed 796 cases—26.2% of the total. Geographic distribution of AIDS patients at these hospitals is more limited, reflecting their community catchment areas and the level of HIV care they provide.

Table 1. Residence of AIDS patients reported by eight Baltimore hospitals

Zip code	Cases through 12/92	Rate/10^5	% of all cases	% of hospital's AIDS cases							
				Johns Hopkins (21205)	Univ of MD (21201)	Francis Scott Key (21224)	Liberty (21215)	MD General (21201)	Mercy (21201)	Sinai (21215)	Union Memorial (21218)
21061	17	33	0.1	1.1	0.2	0	0	0	0	0	0
21201	151	929	5.0	3.3	6.8	3.9	2.7	**17.7**	**11.8**	2.1	1.6
21202	246	859	8.1	9.4	8.3	3.9	1.8	9.1	**13.2**	2.7	7.9
21205	71	299	2.3	5.3	0.6	1.3	0.9	0.5	2.9	0.5	0
21206	48	92	1.6	1.4	0.6	9.0	0	1.5	3.7	1.1	3.9
21207	96	126	3.2	2.2	3.5	0	4.5	3.0	3.7	8.0	0
21208	11	40	0	0.4	0	0	0	0.5	0	0.5	0
21209	21	102	0.1	0.6	0.4	1.3	0	1.0	0	3.2	0.8
21210	12	95	0	0.5	0	0	0	0	0.7	0.5	0.8
21211	18	91	0.1	0.4	0.2	0	0	1.0	0	0.5	1.6
21212	58	163	1.9	2.0	1.7	1.3	0.9	1.0	0.7	1.1	**11.0**
21213	157	333	5.2	8.9	2.3	5.1	0	2.0	6.6	1.6	6.3
21214	21	100	0.1	0.7	0.2	0	0	0.5	0.7	1.6	1.6
21215	262	352	8.6	4.4	7.4	7.7	**27.0**	7.6	4.4	**40.1**	0.8
21216	140	329	4.6	2.7	5.8	5.1	**24.3**	3.0	2.9	5.4	0
21217	388	470	12.8	9.7	**19.6**	5.1	**27.0**	**34.9**	**14.0**	5.4	5.5
21218	255	450	8.4	8.6	4.1	9.0	1.8	3.5	**10.3**	3.2	**46.5**
21219	5	57	0	0	0.2	0	0	0	0	0.5	0
21222	21	36	0.1	0.8	0.2	**11.5**	0	0	0.7	0	0
21223	159	408	5.2	2.5	**12.2**	2.6	2.7	3.5	3.7	1.6	0
21224	64	119	2.1	2.2	1.O	**16.7**	0.9	1.0	0	2.7	0
21225	60	171	2.0	1.3	3.1	0	1.8	0	0.7	0	0.8
21226	0	0	0	0	0	0	0	0	0	0	0
21227	14	31	0	0.3	0.6	0	0	0	0	0	0
21228	18	41	0.1	0.5	0.2	0	0	0.5	0	1.1	0.8
21229	117	217	3.9	2.7	2.9	0	2.7	1.5	2.9	1.1	0.8
21230	60	172	2.0	1.9	3.3	0	0.9	0	5.2	1.1	0.8
21231	52	327	1.7	2.4	0.6	1.3	0	1.0	1.5	1.1	0.8
21234	24	36	0.1	1.0	0.4	1.3	0	0	2.2	1.1	0.8
21236	9	27	0	0.2	0.2	0	0	0.5	0	0.5	0.8
21237	13	52	0	0.3	1.0	1.3	0	0	0.7	0	0
21239	55	172	1.8	1.3	1.2	0	0	1.5	0.7	2.1	1.6
Other	393	11	12.9	22.5	11.4	12.8	0	3.5	5.8	10.2	4.7
Total	3,036	63	100%	100%	100%	100%	100%	100%	100%	100%	100%

Boldface type indicates zip code has >10% of hospital's AIDS patients.

Conclusions

As the AIDS epidemic has evolved in Baltimore, Johns Hopkins Hospital has played a leading role—diagnosing and reporting the most patients. It is the leading referral site for tertiary and specialty care. The University of Maryland Medical Center has played an increasing role as a referral center—also serving a wide area—and is expected to expand that role further, especially given its proximity to the geographic concentration of AIDS patients in central and west Baltimore. As the epidemic continues to grow, neither of these two referral centers will be able to continue to care for such a high proportion of AIDS patients.

A large number of Baltimore community hospitals diagnose, report, and treat AIDS patients in the particular geographic areas the hospitals serve. Their share of HIV services will continue to grow, particularly in the areas of primary and secondary care. The needs of HIV-infected persons in Baltimore will be best served if diagnostic, early intervention, and primary care services can be provided to these persons in or near the communities where they live. Community hospitals and clinics should expand their services in these areas. It may be that Johns Hopkins Hospital and the University of Maryland Medical Center should limit primary care service expansion while taking on a tertiary and specialty consultative role for an expanding number of patients in the later stages of illness.

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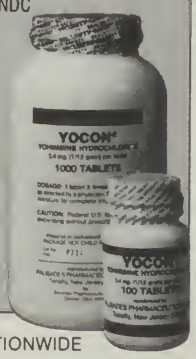
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Prevalence of human immunodeficiency virus-1 infection in a Baltimore acute care hospital

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ABSTRACT: *In conjunction with the Centers for Disease Control and Prevention's (CDC's) national Sentinel Hospital Surveillance System for HIV (human immunodeficiency virus) Infection, we conducted unlinked (anonymous) testing of a systematically selected sample of blood specimens for HIV-1 antibodies to assess the HIV-1 infection level in an urban hospital's catchment population. We excluded specimens from patients with admitting diagnoses often associated with HIV infection. Of the 5,350 specimens tested between April 1988 and October 1989, 106 (2%) were HIV-1 seropositive. HIV-1 seroprevalence in female patients was 1%, and in male patients, 3%. Those 25–44 years of age showed the highest seroprevalence (3.7% in all patients: 6.6% in male patients, 1.1% in female patients). These results demonstrate a high HIV-1 infection level in this patient population and suggest Baltimore hospitals should evaluate the impact and costs of developing routine HIV counseling and testing programs for their patients.*

Between 1981 and 1990, the first 10 years of the acquired immunodeficiency syndrome (AIDS) epidemic, 161,073 cases of AIDS were reported to the Centers for Disease Control and Prevention (CDC).[1] During the same time period, 3,174 cases were reported in Maryland.[2] Baltimore accounted for 1,499 (47%) of these reported cases. The AIDS epidemic has had the greatest impact on young adults. AIDS is one of the leading causes of death in the United States among persons 25–44 years of age.[3] In Baltimore, between 1987 and 1989, the mortality attributable to human immunodeficiency virus-1 (HIV-1)/AIDS among residents ages 25–44 years more than doubled.[4]

The retrovirus HIV-1 is responsible for the majority of HIV infections in the United States. In this report, "HIV" refers to the HIV-1 retrovirus.

Since 1983 and 1989, respectively, AIDS and symptomatic HIV infection have been reportable illnesses in Maryland (Code of Maryland Regulations, 10.06.01). Asymptomatic HIV infection, however, is not captured by this surveillance system. Epidemiologic patterns among persons diagnosed with AIDS or symptomatic HIV infection today do not reflect the current HIV transmission dynamics.[5] Because of the long asymptomatic period of HIV infection, AIDS/symptomatic-HIV surveillance more clearly reflects the HIV transmission level from several years past. For effective HIV health care planning and policy making, AIDS case data and an estimate of the current HIV-infection burden are needed.[6]

In late 1987, CDC designed and implemented the family of HIV seroprevalence surveys to complement AIDS case reporting.[7,8] These surveys represent a national ongoing sentinel surveillance system for HIV infection based on standardized, anonymous survey and serologic testing procedures across geographically diverse US metropolitan areas. These surveys estimate HIV infection prevalence in clinic (drug treatment, tuberculosis, sexually transmitted disease, and women's health) and hospital settings. CDC instituted its hospital-based surveys under the Sentinel Hospital Surveillance System (SHSS) for HIV Infection. The clinic-based seroprevalence estimates are limited in their generality because they monitor narrowly defined groups of people receiving health care, the majority of which are at high risk for HIV infection.[9] Because patients are admitted to a hospital for varied reasons, many of which are unrelated to HIV infection or associated risk behaviors, seroprevalence surveys in hospital settings provide a more general "population-based" estimate of HIV infection.

Since April 1988, in conjunction with CDC's SHSS, the Baltimore City Health Department's Division of Preventive Medicine and Epidemiology conducted unlinked (anonymous) HIV-antibody testing at a sentinel hospital in Baltimore. In this report, we present the results of the first 19 months of data collection.

Methods

Survey design. In unlinked surveys, there is no interaction or intervention with patients for the purpose of the survey. Leftover serum or plasma from blood specimens drawn for routine clinical purposes are anonymously tested for HIV. HIV test results, therefore, cannot be linked to identifiable individuals. This survey methodology eliminates the informed consent requirement and, consequently, the effect of patient self-selection on HIV-seroprevalence estimates.[5,7,8,10]

Excluded were specimens from persons whose admitting diagnosis was among the following SHSS-defined "ineligible" conditions: (1) AIDS or other medical conditions commonly associated with AIDS/HIV infection; (2) conditions that might be expected to occur more frequently among HIV-infected persons, such as diarrhea, pneumonia, unexplained fever, neuropsychiatric conditions, and neoplasms; (3) conditions often associated with medical risk factors (such as hemophilia) or behavioral risk factors (such as drug abuse or sexually transmitted disease) for HIV infection; and (4) gunshot and knife wounds—conditions that have been reported in the past to be associated with higher than expected rates of HIV infection.

HIV-infected individuals, because of their HIV infection and need for additional medical services, may have presented to the hospital in greater proportion compared with other individuals from the catchment population.[9] The intent of the eligibility criteria was to reduce the overrepresentation of HIV-infected individuals in the survey.[5] Eligibility was determined solely by admitting diagnosis. Thus, persons known to be HIV-infected or previously diagnosed with AIDS were eligible if they presented to the hospital with an admitting diagnosis (e.g., broken arm) unrelated to the "ineligible" conditions.

The monthly sample quota of 300 specimens was divided equally between male and female patients and included specimens from six age groups: 0–4 years (40 specimens), 5–14 years (36 specimens), 15–24 years (50 specimens), 25–44 years (100 specimens), 45–64 years (50 specimens), and over 64 years (24 specimens). The SHSS standardized age- and sex-stratified sampling scheme yielded a sample of patients with an age distribution similar to that of the US population, thereby enabling comparisons of results across all participating hospitals.[9]

Specimen selection. Blood specimens were collected over a 19-month time period (April 1988 through October 1989). Each month, survey-eligible inpatient and outpatient serum or plasma, which was remaining after routine clinical tests, was collected until each age and sex category had been filled. In some months, an insufficient number of specimens were available to fill certain age and sex categories. Where possible, specimens in age and sex categories were over-sampled by 10%, and then some were randomly deleted.

Specimens were labeled with a nonpatient-associated survey number. Selected demographic data (e.g., age, sex, race, and inpatient/outpatient status) were retained with the specimens. No patient-identifying information (e.g., patient name or medical chart number) was linked to the specimen. Random deletions of specimens within age and sex categories further ensured patient anonymity.

Patients were included only once during a calendar year. For all specimens included in the survey, a subset of the patient's medical chart number, not linked to the survey number, was recorded, and any successive specimen with the same number sequence was excluded.

HIV-1 antibody testing. The specimens were screened for HIV-1 antibodies using a Food and Drug Administration

(FDA) licensed enzyme-linked immunosorbent assay (ELISA) (Electronucleonics, Inc., Columbia, Maryland). Specimens reactive on the first ELISA and on at least one of subsequent duplicate ELISAs were considered HIV-1 positive by the presence of at least two of the following viral proteins detected by an FDA-licensed Western blot (DuPont Company, Wilmington, Delaware) assay: p24, gp41, and gp120/160.

Statistical analysis. HIV seroprevalence is expressed as the number of specimens that were HIV antibody positive divided by the total number of specimens tested. Chi-square tests were used to determine differences in HIV seroprevalence by demographic characteristics. Odds ratios with 95% confidence intervals were calculated using the Epi Info package of statistical programs.[11]

Estimation of HIV-infected patients, ages 15–54 years, discharged in 1989. Hospital discharge data from 1989 was available for inpatients. Unlinked HIV-seroprevalence estimates for inpatients ages 15–54 years were extrapolated to hospitalized patients of the same age groups who were discharged in 1989. Age- and sex-specific seroprevalence estimates in surveyed inpatients were calculated (age groups: 15–24 years, 25–34 years, 35–44 years, and 45–54 years).

The National Health Interview Survey provided the following estimates on hospitalizations in 1988: 19,746,009 patients with 25,684,734 episodes.[12] From these data, we estimated the average annual number of discharges per patient (1.3). To estimate the number of patients in each age and sex category from our hospital discharge data, we divided the number of discharges in these categories by 1.3. The age- and sex-specific inpatient HIV seroprevalence was multiplied by the estimated number of inpatients in the corresponding age and sex category.

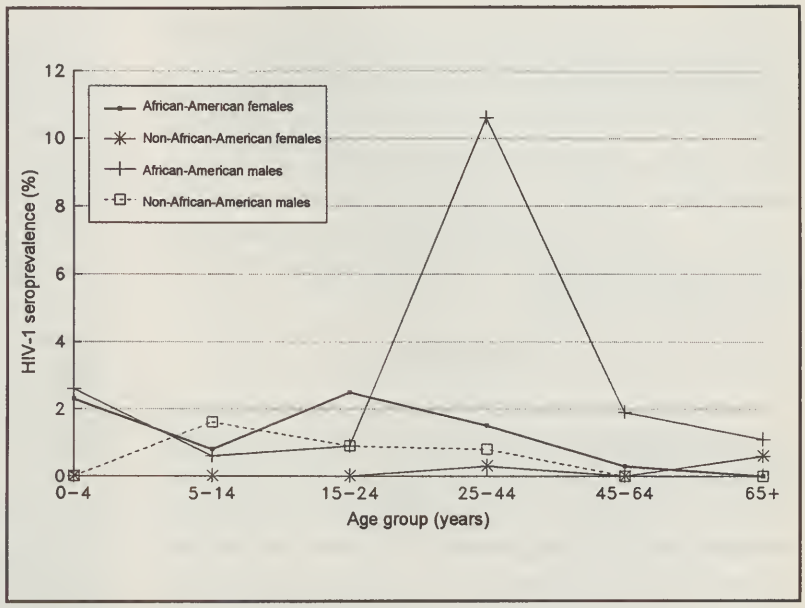


Figure 1. HIV-1 seroprevalence by age group, race, and sex.

Results

Table 1 shows the prevalence of HIV infection by age group and sex. Of the 5,350 anonymously tested specimens, 106 (2%) specimens were HIV antibody positive. A total of 28 (1%) of 2,771 specimens from female patients were HIV positive. In male patients, 78 (3%) of 2,579 specimens were HIV positive. Male patients were more likely to be HIV-infected compared with female patients (odds ratio [OR] = 3.06, 95% confidence interval [CI] = 1.94, 4.84).

Overall, the highest HIV seroprevalence was in the 25–44 year age group (3.7%). In male patients, the highest seroprevalence was in the 25–44 year age group (6.6%). The seroprevalence in this age group was significantly higher when compared with male patients in any other age group. In female patients, the highest seroprevalence was in the 15-24 year age group (1.9%). Except for the 45–64 year age group, however, the seroprevalence in the 15–24 year age group was not significantly higher when compared with female patients in other age groups.

Of the hospital patients included in the survey, 61% were African-American. In African-American patients, 99 (3%) of 3,265 specimens were HIV positive. In white patients, 7 (0.3%) of 2,085 specimens were HIV positive. African-American patients were more likely to be HIV-infected compared with white patients (OR = 9.28, 95% CI = 4.16, 21.83). **Figure 1** shows the prevalence of HIV infection by age group, race, and sex. African-American male patients, ages 25–44 years, had the highest prevalence of HIV infection (10.6%).

Of the hospital patients included in the survey, 67% were inpatients. There were no statistically significant differences in HIV seroprevalence by inpatient/outpatient status.

Table 1. HIV-1 seroprevalence by age and sex

	No. tested (% HIV-1 seropositive)		
Age	**Males**	**Females**	**Total**
0-4	232 (1.7)	194 (1.5)	426 (1.6)
5-14	232 (0.9)	178 (0.6)	410 (0.7)
15-24	339 (0.9)	565 (1.9)	904 (1.5)
25-44	933 (6.6)	1,036 (1.1)	1,969 (3.7)
45-64	566 (1.1)	530 (0.2)	1,096 (0.6)
≥ 65	277 (0.4)	268 (0.4)	545 (0.4)
Total	2,579 (3.0)	2,771 (1.0)	5,350 (2.0)

Based on extrapolation of the survey data, which measured potentially unrecognized HIV infection, to the hospital population, the estimated number of HIV-infected inpatients between ages 15 and 54 years discharged from the hospital in 1989 was 177. Of the estimated 1,777 male inpatients ages 15-54 years discharged in 1989, an estimated 71 patients were HIV-infected. During the same time period, an estimated 106 patients of the estimated 5,730 female inpatients ages 15–54 years were HIV-infected.

Discussion

The overall seroprevalence of the survey population drawn from this Baltimore hospital was 2%. The burden of HIV infection was not evenly distributed across demographic categories. Male patients were more likely to be HIV-infected compared with female patients. In male patients, the seroprevalence was highest in the 25–44 year age group (6.6%). In female patients, the peak seroprevalence was in the 15–24 year age group (1.9%). Seroprevalence was highest among African-American male patients ages 25–44 years (10.6%).

Because the specimens were systematically sampled and stratified by age group and sex, the crude seroprevalence does not represent the total hospital population's seroprevalence. The standardized protocol, however, facilitated comparisons of overall seroprevalence among SHSS-participating hospitals across the United States. HIV prevalence at this hospital (2%) was more than twice the median seroprevalence (0.7%) of the 26 hospitals participating in the national SHSS, but was similar to the seroprevalence seen in other SHSS hospitals in the northeastern and southern regions of the United States.[5]

From the seroprevalence results and the hospital's inpatient discharge data, we estimated the number of HIV-infected patients in the 15–54 year age range (the broadest age range of those at highest risk of HIV infection) discharged in 1989. An estimated 177 patients were HIV-infected. Because the survey protocol excluded those whose admitting diagnosis was associated with HIV infection, this represents a minimum number of HIV-positive patients discharged from this hospital in 1989.

The high seroprevalence and the large number of potentially unrecognized cases of HIV infection underscore the importance of following infection control procedures to increase the safety of health care workers and their patients. Several studies have demonstrated that precautions against bloodborne pathogens were not easily adopted, especially in emergency situations.[13,14] Studies such as this, however, which provide a more complete understanding of the potential number of HIV-positive patients, may serve as motivation to health care workers to protect themselves from nosocomial infections.

In establishing national health goals, *Healthy People 2000* calls for the identification of 80% of HIV-positive individuals by the year 2000.[15] Conducting screening programs in populations at risk is an efficient means of identifying those who are HIV positive. Harris et al have evaluated a Houston, Texas, hospital admission, voluntary HIV-screening program and concluded that "hospitals are an efficient and practical setting for HIV testing."[16] Lombardo et al have suggested that hospitals serving populations with high seroprevalence levels offer HIV counseling and testing to patients as part of their medical care.[17] More recently, CDC proposed strategies for hospitals without access to HIV seroprevalence data, suggesting that hospitals with one or more newly, diagnosed AIDS case per 1,000 discharges per year offer voluntary HIV counseling and testing to patients ages 15–54 years.[18]

There are many potential individual and societal benefits of HIV counseling and testing.[19] Early detection of, and medical intervention in, HIV infection increase life expectancy for those with HIV infection.[20] A counseling and testing program can prevent further HIV spread by providing pre- and post-test opportunities for educating seropositive and seronegative patients. Furthermore, monetary estimates of the lifetime cost of treating a person with AIDS have reached over $100,000.[21] Preventing new HIV infections will help control future AIDS medical care costs. The results of our seroprevalence survey suggest that Baltimore hospitals should evaluate the impact and costs of developing routine HIV counseling and testing programs for their patients.

It is important to note that prevalence is a measure of the number of individuals with a certain characteristic at a point in time. From these data, it is difficult to determine the rate at which new cases of HIV infection are occurring (incidence). Since HIV has a long latency period, the prevalence of HIV infection in a given population is affected by the length of time a population has been exposed to the virus and the relative "effectiveness" of HIV transmission in the population. While this survey demonstrates that the sampled population in this Baltimore hospital had a high prevalence of infection, especially in certain demographic subgroups, it does not shed light on the incidence of HIV infection in this population.

The SHSS is an ongoing project, with annual seroprevalence surveys being conducted in the same hospitals following standardized protocols. Trends in HIV seroprevalence can provide an estimate of HIV-infection incidence. This hospital continues to be part of the SHSS, and further analysis of HIV-infection trends in its patient population may help predict the impact of the HIV epidemic. Ultimately, these data should help prevention efforts by identifying populations into which the epidemic is moving, as well as those populations already affected by this disease.

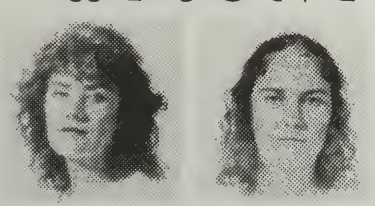
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Intentional injury—homicide as a public health problem

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From the Baltimore City Health Department where Dr. Wood is assistant commissioner, Mr. Amanfo is an epidemiologist, Ms. Rodgers is director of the Office of Minority Health, Mr. Dorsey is deputy commissioner, and Mr. Woods is commissioner of police; from the Baltimore Mentoring Institute where Mr. Rowe is director; from the Mayor's Coordinating Council on Criminal Justice where Mr. Davis and Ms. Brown are directors; and from the Office of State's Attorney where Mr. Simms is state's attorney for Baltimore.

ABSTRACT: *This article is an epidemiological analysis of Baltimore homicides between 1986 and 1990. The main findings were that young African-American males between 15 and 34 years of age are at greatest risk of homicide victimization. Homicidal events primarily occurred with handguns, in drug-related circumstances, between acquaintances, and in the western police district area. Questions are raised concerning the expansion of the public health professional's role and the use of epidemiologic data for injury prevention programs. This article is the result of a grant from the Centers for Disease Control and Prevention, Division of Injury Control, to the state of Maryland, Department of Health and Mental Hygiene, and the Baltimore City Health Department.*

Homicide is a major public health problem for African-Americans across the nation. It has been one of the leading causes of death for all African-Americans for over two decades and the primary cause of death for African-American males between the ages of 15 and 34 years of age for over one decade. Throughout America, interpersonal violence has continued to rise, affecting not only victims but their assailants, their families, and the community. Assaults have resulted in sensory, musculoskeletal, and psychological disability. Emergency room, surgery, intensive care, pharmaceutical, and inpatient and outpatient costs are staggering. The social costs of funeral expenses, crime scene clean-up, and loss of a family provider also continue to grow.

The economic costs of days off from work and school, payment for child care services, and legal and funeral expenses add to the morbidity burden. When major bodily trauma is sustained as a result of an attempted homicide, the change in quality of life results in economic drain, as well as the costs of

mental anguish associated with activity constriction and fearful ruminations over the trauma.

Public health practitioners must strive to understand better this public health problem's epidemiology and develop strategies to reduce the burden of interpersonal violence on mortality and morbidity outcomes. This paper describes a five-year analysis of Baltimore homicides.

Methodology

All Uniform Crime Report data collected on Baltimore homicide deaths occurring between 1986 and 1990 were used for this study. These data from the Baltimore City Police Department include all criminal and justifiable homicides that occurred in Baltimore. The geographical areas analyzed represent the nine police districts.

Results

Risk of homicide. Homicide victimization has continued to increase since 1987. In 1986, the age-adjusted death rate from homicide was 32.5 per 100,000. From 1987 through 1990, this death rate increased from 31.6 to 32.9, 36.5, and 42.5, respectively. By race, 91.2% of homicide victims were African-American, 7.9% were white, 0.4% were Hispanic, .02% were Asian-American, and 0.1% were other.

African-Americans comprise the largest minority population in Baltimore. Hence, African-American will be the designated term used in this paper to reflect the minority or nonwhite label.

When African-American rates were compared with white rates of victimization, African-Americans were more than four times as likely to be victimized as their white counterparts (50.6 vs 11.6 per 100,000). Race and sex analyses revealed that African-American males were at the greatest risk of homicide, followed by white males, African-American females, and white females. African-American males were five times more likely, and African-American females were over two times more likely, to be homicide victims than their white counterparts. Between 1986 and 1990, the age-adjusted homicide victimization rate per 100,000 was 6.7 for white females, 17.0 for white males, 15.8 for African-American females, and 90.7 for African-American males.

Individuals between 15 and 24 years of age were at greatest risk, followed by those 25 to 34 years old. What is striking is the finding that there was a significant increase in risk for individuals between 15 and 24 years of age from 1989 to 1990. The rate jumped from 83 to 108 per 100,000 population—a clear increase in adolescent victimization.

During this five-year period, the victimization ratio between African-Americans and whites was 9:1 for those 15 to 24 years of age. For those 25 to 34 years of age, the ratio was 8:1.

Weapon. During the period 1986 through 1990, firearms were the primary weapon of choice for committing homicides. Firearms accounted for 64% of homicides, followed by cutting or piercing instruments (20%) and bludgeons (7%). Handguns accounted for 94% of all firearm-related homicides. For both African-Americans and whites, firearm assault was the primary method of homicide. The death rate for the two respective groups was 32.4 and 4.93 per 100,000.

Circumstances and location. Most homicides involved drugs or drug trafficking and occurred in city streets. Homicides involved drugs 42.4% of the time, arguments 20.9% of the time, and robbery 10.8% of the time. The primary locations for most homicides were the streets, private residences, and apartments. Shop parking, vacant residences, school playgrounds, nightclubs/taverns, and parks/playgrounds were not as predominate homicide sites.

Relationship and age of victim to assailant/arrestee. The majority of homicide victims were acquainted with their assailants. In general, male homicide victims were more likely to be killed by acquaintances, whereas females were more likely to be killed by family members. Whites were most likely to be killed by strangers (4.67 per 100,000), followed by acquaintances (3.3), family members/relatives (0.07), and lovers/spouses (0.2)

The age of homicide arrestees reflected the high homicide risk for those ages 15 to 24 and 25 to 34. The majority of homicide arrestees and homicide victims were in these age groups, with most being in the 15 to 24 age range.

Geographical locale. Over the course of this period, homicides in the nine police districts were analyzed. The highest and lowest death rates were in the western (75.4) and northeastern (14.7) police districts. Following behind the western police district were central (66.9), eastern (60.5), northwestern (37.5), southwestern (31.7), southern (29.1), southeastern (25.2), and northern (17.7).

When type of weapon was examined, firearms and cutting/piercing instruments continued to be first and second in rank order across all districts. Looking at age of victim and police district, the majority of homicides occurring among those 15 to 24 years of age occurred in the northwestern district, whereas most homicides among those 25 to 34 years of age were in the central district **(Table 1)**.

Discussion

Between 1986 and 1990, African-American males, 15 to 34 years of age, were the most likely homicide victims in Baltimore; they were eight to nine times more likely to be victimized than their white counterparts. Homicides tended to occur with the use of a handgun, in drug-related circumstances, on the streets, and during arguments with acquaintances of similar age. In Baltimore, the western police district was the locale with the greatest victimization risk.

These findings are consistent with national data from the Centers for Disease Control and Prevention Homicide Surveillance Reports.[1] In Norton and Smith's *Homicides in Baltimore*,[2] those 24 to 34 years of age were at greatest risk for

Table 1. Homicides by age and police district, Baltimore, 1986-1990

	Baltimore City Police District															
	Central		Southeastern		Eastern		Northeastern		Northern		Northwestern		Western		Southwestern		Southern	
Age	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No	(%)
<15	5	(3.2)	4	(4.1)	10	(5.2)	8	(7.5)	6	(6.7)	11	(6.3)	6	(2.4)	5	(3.0)	4	(3.9)
15-24	50	(32.1	26	(26.5)	72	(37.1)	34	(32.1)	27	(30.3)	70	(39.8)	91	(36.1)	45	(34.9)	29	(28.2)
25-34	53	(34)	26	(26.5)	59	(30.4)	34	(32.1)	29	(32.6)	53	(30.1)	84	(33.3)	49	(38)	36	(35)
35-44	24	(15.4)	21	(21.4)	30	(15.5)	14	(13.2)	13	(14.6)	23	(13.1)	42	(16.7)	16	(12.4)	19	(18.4)
45-54	7	(4.4)	7	(7.1)	13	(6.7)	4	(3.8)	7	(7.9)	6	(3.4)	14	(5.5)	7	(5.4)	4	(3.9)
55-64	10	(6.4)	6	(6.1)	4	(2.1)	5	(4.7)	2	(2.2)	5	(2.8)	9	(3.6)	3	(2.3)	4	(3.9)
65+	7	(4.4)	8	(8.2)	6	(3.1)	7	(6.6)	5	(5.6)	8	(4.5)	6	(2.4)	4	(3.1)	7	(6.8)
Total	156		98		194		106		89		176		252		129		103	

homicides. Our findings show that homicide victims are becoming younger and younger; this is consistent with national trends.[3] The finding that African-American males 15 to 24 years old had a homicide rate of 108 per 100,000 greatly exceeds the 1990 and *Year 2000 Health Objectives* for this population; the 1990 health objective was fewer than 60 homicides per 100,000.[3]

In addition to the disturbing epidemiological findings related to young African-American males, was the finding that most homicides occurred with handguns and in drug-related circumstances on the streets. The authors agree with Webster et al[4] that gun control is important in the prevention of handgun-related mortality and morbidity. This clearly, however, is not sufficient. The recent handgun thefts from gunshops in Maryland and throughout the nation speak to the need for wider ranging gun control laws. Just as clearly, however, the need for dropout prevention, increases in employment opportunities, and support for family discipline and cohesiveness cannot be ignored.

The public health field has gone beyond the traditional criminal justice and medical models of behavior and disease. Epidemiological findings of different ages at risk in different geographic areas strongly suggest the need for a variety of prevention strategies for these diverse communities. Peer-group conflict-resolution strategies may have greater impact in younger groups, whereas readily available employment opportunities, with mentoring, may be appropriate for other age groups. This study reflects the need for public health professionals in various disciplines to share information, educate the public, and implement and evaluate programs to reduce firearm-related homicides.

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Editor's note: See book review of *Homicide: A Year on the Killing Streets* on page 784.

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Maternal and child health services in the Baltimore City Health Department, 1900-1992

Grace Black, R.N., M.S.N., and Nira Bonner, M.D., M.P.H.

Ms. Black and Dr. Bonner are employed by the Baltimore City Health Department.

ABSTRACT: *Maternal and Child Health Services in the Baltimore City Health Department, founded in 1934 and 1919, respectively, grew out of concern for maternal and infant death. Increasingly, services have focused on prevention and on building individual health by strengthening the family. The authors identify changing patterns of health care and the health department's continuing role in assuring high quality care and developing guidelines for cost-effective management.*

The early Maryland settlers brought with them a strong tradition of preventive health measures which, in 1797, were translated into City Ordinance 11 (dealing with the prevention of pestilential and other diseases) and Ordinance 15 (concerned with preventive sanitary measures).[1] These ordinances laid the foundation for guarding the city's health. Local programs, however, that addressed mothers' and children's specialized needs did not come into being until the beginning of the twentieth century, paralleling the advent of national legislation pertaining to maternal and child health and welfare.

The federal government's Children's Bureau was created in 1912,[2] following a resolution of the 1909 White House Conference on Child Health—the first gathering of its kind on a national level. The bureau's initial mandate was to address infant mortality—a problem that continues to burden Baltimore women of childbearing age today. Two assumptions of this early federal bureau continue to guide Baltimore public health policy in maternal and child health. These include recognition of (1) the intricate and delicate relationship between maternal health, birth outcome, and later health status of infant and child, and (2) the role that socioeconomic factors and environmental factors have on the health of mother and child. The first federal law pertaining directly to maternal and child health, known as the Sheppard Towner Act, was passed in 1921.[2] The act targeted maternal and child health services by sex and age groupings. The landmark legislation represented the

first instance in which the US government provided direct support of health services for any of its citizens. Due to strong opposition against this early form of socialized medicine, the act was allowed to lapse, and the national maternal and child health programs ceased to function. In 1935, however, after five years of inaction, Title V of the new Social Security Act reinvigorated the federal government's role in the health and welfare of mothers and their infants. It established the public's responsibility for the well-being of all children born into this society—a responsibility still addressed today.

Although the Baltimore City Health Department placed its first school nurse in 1905, it was not until 1919, five years after the establishment of the federal bureau, that the Baltimore Bureau of Child Welfare was created.[1] Fifteen years later, the Baltimore City Health Department established the Bureau of Maternity Hygiene in 1934.[3] As a measure of its impact, it is notable that in 1900 there were 86 maternal deaths per 10,000 live births, but by 1949, this rate had decreased to 55 per 10,000 live births.[4]

The story of maternal and child health cannot be separated from that of public health nursing, which was established as a Baltimore bureau in 1920 with child health, well-baby, and maternity clinics providing primary care to families. Although the terms "family-centered health care," "case management," and "primary care provider" did not come into vogue until much later, these concepts were applied early on in the provision of maternal health care services. To this day, however, all programs—even those labeled family-centered health care—have dealt with family only in the sense of using family support to improve the health of mothers and children. The programs still do not provide health services to adults other than women of childbearing age nor attempt a holistic approach to the family as a unit. This shortcoming is manifest in the manner in which national mother and child health laws are written and administered under the collective Maternal and Child Health Block Grant.

In the early part of the century, public responsibility for maternal health was shared with obstetric departments of teaching hospitals. Home deliveries were attended by medical students from teaching hospitals, while beds for indigent patients were available at city hospitals. Maternal services reached their heyday in the 1960s and 1970s when considerable funding was made available through an innovative program called Project 501.[5]

During the 1980s, the Baltimore City Health Department provided prenatal care primarily through funding and oversight of two maternity centers: the Westside Center run by the University of Maryland Hospital, and the Eastside Center managed by the Johns Hopkins Medical Institutions. Due to a resurgence in the infant mortality rate, the health department recently re-instituted prenatal care initiatives with programs such as Healthy Start* and the Baltimore Project.

At various times during this century, the child health spotlight has fallen on different age groups (i.e., infants and preschoolers, school-age children 6–12 years of age, and adolescents). These changing emphases have been based on assorted factors, including actual health and disease trends as reflected in morbidity and mortality statistics and the development of health standards such as milk pasteurization and the enriching of flour. In addition, a growing concern for children's rights in the century's early decades, the women's movement, growth in the concept of self-determination, constraints brought about by growing health care costs, the trend toward privatization, and the strong leadership of Baltimore-based health professionals have helped shape local child health services.

Although the Baltimore City Health Department did not have a formal policy and planning division until the 1980s, thoughtful analysis has always guided policy development and application. Public health leaders have collaborated with the health department[6,7] in conducting major studies, and, more recently, department staff have directed internal studies. The health department "networked" with interested groups and agencies long before the word was invented. The network included the Medical and Chirurgical Faculty of Maryland (Med Chi), the University of Maryland, the Johns Hopkins University, the Baltimore Department of Education, local physicians, the Baltimore Department of Recreation and Parks, and various anti-poverty programs and agencies such as Head Start, Model Cities (later called Urban Services), and the Job Corps.

Basic services for children, regardless of age, have always included physical examinations with state-of-the-art developmental evaluations, referral for problems, and parent counseling, whether called anticipatory guidance or health education. The tools of child health could always be contained in a nurse's bag, the ubiquitous ice bucket or cooler, and assorted cartons stashed in a nurse's vehicle, whether it was a Model T, a Volkswagen, or the motor scooter used by one nurse in the 1960s.

Integral parts of child health services include lead paint poisoning prevention and treatment, handicapped children services, vision and hearing testing, identifying and arranging for services for learning disabled children, nutrition, and social services.

The services that varied the most over time were those for adolescents. Until 1959, services for students in secondary schools were provided by the Baltimore Department of Education. At that time, school nurses "came over" to the health

**Editor's note: Med Chi will be spearheading the infant mortality review for the Healthy Start Project. In addition, a multidisciplinary group will be formed under Med Chi auspices to make recommendations to improve services directly to the Healthy Start Program, formulate recommendations to the Governor's Commission on Infant Mortality, and to possibly make recommendations for legislative changes.*

department. Physicians were the dominant provider for adolescent health services. As might be expected, many health problems were identified but were not aggressively followed up. In those days, it was believed that adolescents were the healthiest segment of the population. Not until after the Harlem Study of Adolescent Health did physicians and others take a closer look at data and realize the health department should take a more active role in adolescent health. Adolescents were, subsequently, included in comprehensive child health services and family planning services, and attention was given to their special needs in maternal health. Again, adolescent experts in the teaching hospitals provided valuable help in health department programs development. During the 1960s, teen pregnancy began to be seen as a health risk rather than a moral problem identified by calling a pregnant teen an "unwed mother." Today, many programs address adolescent health, recognizing that the teen is a child still in the process of becoming an adult, while at the same time facing adult responsibilities. It is hoped that these programs can be continued and enhanced as the health department determines what is the best use of resources. Effective programs for teens have a direct impact on two generations.

Another area identified closely with child health is immunization. Med Chi provided the first inoculations for yellow fever, cholera, and smallpox at the almshouse starting in 1801 or 1802.[1] The health department began giving smallpox vaccinations about 1824. When the health department began its child health clinics, immunizations became an integral part of the health supervision. Some innovative ways of getting the community vaccinated were "Salk Sundays," which were held when Salk polio vaccine first became available. A nurse-sanitarian team would go door-to-door with the Sabin oral polio vaccine, knocking on doors and asking if the families had any uninoculated children. The sanitarian followed, carrying the cooler of vaccine and a bull horn, announcing free vaccine.[8] Other campaigns included the "Rub Ella Out" school campaigns against rubella, the "Measles Saturdays," the mobile van that traveled into neighborhoods, the immunization clinics run by the school health department, the city-wide "Shots for Tots" campaign to celebrate the world summit on children in 1990, and the massive 1992 health campaign mounted by the National Guard with the help of community health nurses. In many clinics, these services are no longer free, nor are they covered services under some employee health plans.

Current status in maternal and child health services

During the past three years, the health department has held a number of forums to develop strategic plans for defining and implementing the department's role in primary care. Some conclusions reached include:

- Prevention is fundamental to public health. Early intervention is a subcomponent of prevention and not easily distinguishable as both involve similar techniques and approaches. Primary care is largely a preventive and interceptive activity based on physician–patient medical models.
- In the context of maternal and child health, prevention means providing primary care for pregnant women (i.e., prenatal care and outreach for those at particular risk)—early intervention. Once the child is born, primary care (comprehensive pediatric care) is essentially early intervention—outreach to families with infants at risk. The Baltimore City Health Department's priority for children and its objectives for reducing infant mortality rates, lead toxicity, and teen pregnancy are consistent with traditional health departments roles.
- The health department must continue its traditional role of protecting the community's health through a combination of prevention, early intervention, and primary care procedures, activities, and programs.
- The health department should demonstrate effective programs, develop guidelines for cost-effectiveness and quality management, and monitor Maternal Child Health Block Grant programs. It should continue direct delivery of program services where mandated and where no other resources are adequately available.
- Defining the health department's role in providing family health services is a very significant issue that continues to surface in planning forums. The health department has enlarged its mission to include the integration of services applicable to a family unit and re-aligned services to validate the family's central role in a child's life, including the strengths and needs of fathers. It is vitally important, however, to keep a distinct unit responsible for mothers and children. The close links between services for mother and child must remain intact for continuity of care and other measures of quality assurance.

So many faces and pictures come to mind as the authors try to describe "how it was" in maternal and child health in the early years. One author's experience spans almost half the life of child health services in the Baltimore City Health Department. The other author became involved more recently, but has participated in most major changes in recent years, wielding a scalpel with one hand to fix or prune existing programs, while nurturing new growth with the other hand.

- What will the next 50 years of maternal and child health services be like?
- Will traditional patterns of care be followed?
- Will policy making and program implementation ever be integrated? Will prevention ever be made a major focus, saving health costs and human misery?

- Will the family be viewed as a unit and vehicle for building healthy members?
- Will ways of collecting data be standardized to more accurately reflect needs and progress in meeting those needs?

Perhaps some young professional reading this article will be around to write an update of the maternal and child health services story in 2043.

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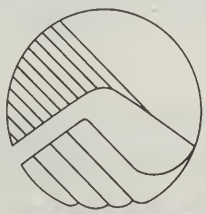
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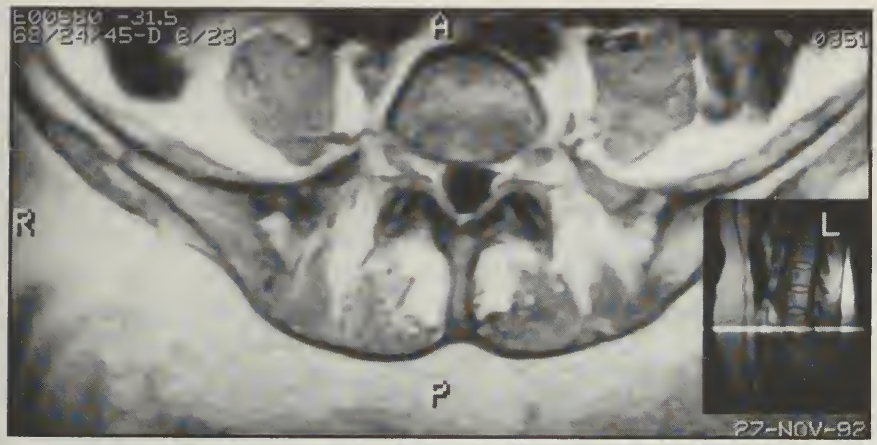
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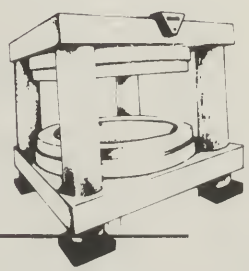
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Book Reviews

Living with Rheumatoid Arthritis. Tammi L. Shlotzhauer and James L. McGuire. Baltimore: The Johns Hopkins University Press. 1993. 216 pages. $22.95

About three million Americans—many in the 20–40 year age range—suffer with rheumatoid arthritis (RA), and, this year, 200,000 more will join the ranks. If all concerned cooperate in their care, they may live full, satisfying, and highly productive lives. Knowledge of RA provides the power to cope with and answer the problems that will be encountered.

Living with Rheumatoid Arthritis presents a thorough discussion of the articular and extra-articular symptoms. In addition, valuable portions of the book are concerned with exercises for various joints that may be involved and with medication advice. Rheumatologists now believe that the more powerful medications should be used early in the course of the disease before irreversible joint damage is present. Aspirin and nonsteroidal anti-inflammatory drugs are now being offered less frequently as the first-line approach.

The disease-modifying anti-rheumatic compounds (injectable gold, oral gold, hydroxychloroquine, penicillamine, and sulfasalazine) alter the course of RA by controlling arthritis and preventing joint damage. Although these drugs do not provide fast pain relief, improved comfort is often a long-term benefit. Special attention is given to the immunosuppressants, which include methotrexate, azathioprine, and cyclophosphamide. The side effects of these potent drugs are reviewed carefully.

When medications resembling natural cortisone are taken in larger amounts than the body normally produces, a marked decrease in the inflammatory process is observed. Frequency of the numerous side effects seen in steroid treatment of RA is related to dose size, treatment length, and nature of the individual patient. Cortisone injection into an involved joint is efficacious and usually well tolerated.

The most important part of the therapy advice is contained in a section called "Coping Strategies." Patients encounter physical and mental changes in the course of RA, and a strategy to meet these challenges is all important. A satisfactory life by the individual with RA may be attained by assessing the difficulties engendered by it and then modifying behavior in concordance with available resources. Continuing reassessment is necessary to attain realistic goals and a more pleasant life. Although the doctor, medications, and relatives may help considerably, the therapeutic goal will not be achieved without the patient's thoughtful and enthusiastic cooperation.

Surgery for arthritic joints is an option recommended for a variety of reasons. The most common is to control severe pain caused by inflammation or damaged joints.

Rheumatologists will be familiar with the material in this RA review. They should read it, however, as they might wish to recommend the book to their patients and patients' relatives. The message that one has a chronic disease may be depressing, but these emotions may be alleviated or ablated by the therapeutic counterattack mounted by the patient. Knowing what to do and then doing it may be the first steps toward at least a partial recovery and a happier life.

Shlotzhauer and McGuire have given patients with RA a *vade mecum* about this disease. Because the nuances of RA must be understood by the patient and the relatives to permit optimal management of the disorder, the book is particularly valuable.

JOSEPH M. MILLER, M.D.
Timonium, Maryland

■ ■ ■

Homicide: A Year on the Killing Streets. David Simon. New York: Fawcett-Columbine. 1991. 594 pages. $24.45

Most book reviews in the *Maryland Medical Journal* deal with manuscripts describing medical disease, various aspects of health care delivery, or "guiding lights" in the medical profession. This month's *MMJ* contains a sobering report of homicide as a public health problem in Baltimore during the years 1986–1990 (see Wood et al, page 771). For readers of this public health report who want to delve further into this aspect of sociological deviation, David Simon's book, *Homicide: A Year on the Killing Streets*, is both an informative and fascinating read.

Homicide is Mr. Simon's description of his year as a police intern. He followed investigations by members of the Baltimore Police Department Homicide Unit as they pulled together the jigsaw puzzle of a year's worth of murders in Maryland's largest city.

The book's primary subject is both depressing and sobering, and it closely mirrors the Baltimore City Health Department's description of this violent crime. Many of the crimes described center around drug use and drug dealing, and the amount of sympathy elicited for the victims by the investigating detectives is not extreme. In subsequent investigations, the frequent lack of cooperation by residents in neighborhoods where these violent crimes are being committed bespeaks to the apathy and despair existing in many inner city Baltimore environs. It is also a vivid demonstration that available social institutions and educational opportunities have not provided many young African-American males with the skills necessary to earn a livelihood other than from drug dealing.

Simon's book points out that "all murders are not equal." The term "redball" is used to describe the murder of someone uninvolved in any criminal activity. Several murders involving children were particularly difficult to handle, both for the community and the investigating detectives. A near fatal shooting of a police officer aroused strong emotions of revenge in the whole unit. A fatal shooting, apparently by a police officer, became an ambivalent experience for the primary investigating homicide detective. Simon's description of the "Black Widow of Baltimore" who took out life insurance policies on multiple husbands and various relatives, and then hired addicts and thugs to kill the insureds so she could collect insurance proceeds, was almost humorous.

As physicians, we have dedicated our time and energies to saving lives and alleviating pain and suffering. It is hard to imagine that anyone, no matter how desperate, could so casually and callously end the life of a fellow human as is described repeatedly in this book. Simon's work is a poignant reminder of the feeling of futility that has pervaded many inner city areas in the United States. It also fosters a deep appreciation for the sanctity of life and a realization that new social initiatives and economic incentives that effectively combat inner city problems are well worth the sacrifices needed to accomplish them.

ROBERT G. KNODELL, M.D.
Owings Mills, Maryland

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Blue Cross and Blue Shield of Maryland derivative litigation

The Med Chi Council voted on July 15, 1993, to approve involvement of the Faculty as *amicus curiae* in the following action. A group of physicians and policyholders of Blue Cross and Blue Shield of Maryland, Inc., including Charles F. O'Donnell, M.D.; John C. Ahlberg; Kenneth R. Glauber; Paul A. Mullan, M.D.; Dana Whitehead; and Donald G. Light, has brought a policyholder's derivative action on behalf of Blue Cross and Blue Shield of Maryland (BCBSM) against certain present and former officers and directors of BCBSM for negligence and breach of fiduciary duties in the management of the corporation, as disclosed in hearings before the United States Senate in 1992. The individual defendants include the following: Carl J. Sardegna; William Beasman, Jr.; Barry Bosworth; J. Owen Cole; Dan A. Colussy; M. Thomas Goedeke, E.D.; Frank A. Gunther, Jr.; John J. Jeffries; Albin O. Kuhn; Fred M. Gloth, Jr.; Charles E. Vadakin; Phillip H. Grantham; Stephen E. Bailey; Peter J. Kampisi; and Hadley C. Ford and Booz-Allen and Hamilton, Inc., an accounting firm.

The attorneys for the policyholders in this action approached Angus R. Everton, Med Chi general counsel, with the request that Med Chi lend its name and *some* legal services to the plaintiffs in the capacity of *amicus curiae*. In this capacity, Med Chi could assist in the preparation of briefs and legal memoranda, and would be listed as *amicus curiae* on behalf of the plaintiffs on pleadings, but would not be directly involved in the trial of the case or in any oral arguments on appeal. An *amicus curiae* is "friend of the court" and enters into litigation because of an interest on its part in the outcome, on one side or the other.

The reasons for becoming involved in this litigation as *amicus curiae* are as follows: The lawsuit is analogous to a stockholder's derivative action, brought on behalf of BCBSM, to recover substantial sums of money that were allegedly dissipated by the corporation through the acts of the various defendants, including the accounting firm. This is lost money that had to be made up out of the pockets of policyholders and treating physicians, and, if it is recovered, the ultimate effect will be diminished premiums to policyholders and, quite possibly, more reasonable payments to all health care practitioners who provide services compensated by BCBSM. Obviously, if in fact the allegations in the complaint are true, and if these officers, directors and the accounting firm, through their conduct, caused this sort of monetary injury to BCBSM, the funds lost should be recovered. It was thought by the Executive Committee and, ultimately, the Council that it was clearly in the interests of the Med Chi membership to see that BCBSM is financially sound, and this lawsuit was perceived as one means by which some degree of financial soundness could be restored to the Blues.

Council's decision has been conveyed to Messrs. Nolan and Brassel, attorneys for the plaintiffs. Any questions regarding Med Chi's future involvement may be directed to Angus R. Everton, Esq., Med Chi general counsel.

ANGUS EVERTON, ESQ.
Med Chi's general counsel. ■

Forty years ago

Forty years is a fascinating interval. It can be seen as a generation—four decades of change and advancement: new medications, new diagnostic tools, and new techniques and procedures.

On the other hand, human nature may not have changed very much. *Plus ça change, plus c'est la même chose.*

Excerpts from the past are selected to remind us of our limitations. Some limitations of the past may seem silly in today's scientific light, but others may point out the ignorance of today and the need to mush on with some humility.

1953:
The Korean armistice was signed in July.
The St. Louis Browns moved east and became the Baltimore Orioles.
Queen Elizabeth was crowned.

Below is material from February 1953. A monthly report by the executive director of the insurer followed by a thoughtful article by a Med Chi member. If the insurance business and Med Chi had paid closer attention to some comments from Wicomico County, "progress" might have been more cautious and the parachutes less golden.

JOHN W. BUCKLEY, M.D.

The employer and Blue Cross–Blue Shield

Reprinted from the *Maryland State Medical Journal* 1953; 2(1): 101–3.

The Blue Cross–Blue Shield subscriber who utilizes his membership to cover the expenses of his hospital and medical care quite naturally feels grateful to the doctors and hospitals who guide him toward better health. He is grateful to Blue Cross–Blue Shield for taking care of all or part of the bills. He may even be aware of the fact that there is a close relationship between those members of the team that helped him; that Maryland Hospital Service and Maryland Medical Service are, in effect, the agents of the hospitals and the doctors in bringing him the best treatment at a cost he can afford.

But there is another important figure in the background of the picture. It is the businessman: the employer whose cooperation made it possible for the working man to enjoy the benefits of the Plans.

The employer contributed a great deal more to the success of Blue Cross—Blue Shield than his permission to allow membership solicitation to be made on the job and to set up the simple system of payroll deduction of subscription charges

on a group basis. The entire group principle is based on willingness to work with other members of the community health team. Blue Cross and Blue Shield benefits and rates are predicated upon the group principle, namely, that an average selection of risk is obtained which, in turn, means low subscription rates. No health statement is needed, such as would be required if memberships were sold to individuals.

That our very existence is contingent upon the employer's cooperation and sponsorship, we all know, but he benefits himself in many ways from Blue Cross and Blue Shield. He derives satisfaction from knowing that his employees are protected against hospital and medical bills. He recognizes that such protection gives the employee more peace of mind and less worry about his personal finances. He knows that it increases the respect of the employee for the company that makes his welfare a part of its personnel policies. He has learned that absenteeism due to illness and poor production on the job are lessened when the employees know that they can afford hospital and medical care at the first symptoms of sickness. In the long run, he finds that it pays in both good will and good business operation to encourage enrollment of his people in a Blue Cross-Blue Shield group. And, finally, looking beyond the doors of his own firm, he sees that he is contributing to the general welfare and good health of people in his community.

R.H. DABNEY

R.H. Dabney was executive director, Maryland Hospital Service, Inc., Maryland Medical Service, Inc.

Blue Cross, Blue Shield; "Indemnity" or "Service"

The voluntary hospital is an ever more efficient agent and has come a long way in the last 100 years. Originally conceived as a concentration point for the bedside care of hopeless invalids, few of whom expected to, or did, become rehabilitated; the converse is now so generally true that few expect otherwise.

Although the procedures that the physicians carry out and the medicines and biologicals they use have changed radically; the main services which the hospital renders are basically unchanged viz., housekeeping and nursing care for the sick patient, on the one hand; technical aid to the physician, in his diagnostic or therapeutic efforts, on the other.

The professional nurse is an important part of this complex and her intelligent dispatch of the systems of treatment, outlined by the physicians in charge, determines greatly the nature of the result.

The voluntary hospital was, from the beginning, a charitable and cooperative community answer to the problems of the sick patient; where the facilities could be maintained for all and a nominal charge be made to the users; except the poor. The more fortunate gave freely. The poor, in the real sense, have all but disappeared. Although many are most comfortable, few are sufficiently secure and substantial to consider themselves in the roles of personal philanthropists. The base had to be "broadened," but the hospital patient resisted, and rightly, to becoming the sole support of the hospital. The Blue Cross Plan was a splendid solution—a form of voluntary taxation, mutually levied on the potential users, in groups. The plan solved a difficult situation; but left much to be desired. The public which could prior scarce afford C.O.D. services, and seldom made provisions against the possibilities; now began to gather momentum as Pre-Paid Consumers.

The Pre-Paid Consumer begins his cycle with the natural relaxation of peace and protection; but he has repeatedly demonstrated his ability to develop a healthy, if not a voracious, appetite for things to which he is "entitled." Hospitalization; and its more expensive accessory goods, and services have proven no exception. This has become the kernel of every conference and meeting that is concerned with patient costs; and to postulate that the physicians have effective control and could limit the consumption of these goods and services is sheer fantasy, if not worse!

The lowered mortality and morbidity; and the generally pleasant air in hospitals today, has removed virtually all the deterrents that faced the potential patient; the last barrier is gone, or was, when full pre-payment appeared. To ask the physician to deny the subscriber his use of the Plan is asking him to correct an inherent fault too great; and a fault many physicians foresaw from the inception. The prohibitive cost of automobile collision insurance, except when on a deductible

basis, suggests an approach toward an answer to this Pre-Paid Consumer whose appetite will one day exhaust the reserves; in short, nullify the purposes of the entire plan.

So much for the community's cooperative attempt, to find a satisfactory answer to the inadequate home sick-room; and which has evolved the modern voluntary hospital in America, a monument to devotion and service. The Blue Cross is an excellent attempt toward equitable finance, in the field of hospitalization, but some of its features have far reaching aspects deserving close and careful consideration.

The professional doctor and professional nurse are only by association part of the hospital; and in a sense the nurse is the liaison between doctor and hospital; all three rendering a distinct indispensable service to the patient. The gradual merger of the vision of nurse and hospital has progressed to the point where the nurse, as an individual of professional ability is almost unnoticeable. This is to be deplored. The nurse should be a team member; cooperative but *professional.*

The nurse can hardly recall that her counterpart of a century ago once worked almost solely in patient's homes. Not so the physician; his activities in the hospital have only recently become a major, albeit always important, part of the many functions of his profession. He has adapted himself and his patients to the hospital and it to him. He depends on the hospital, from a practical standpoint, but not fundamentally.

As to his services to the patient, they resist definition; and this is the key to a profession. The amount, type, scope and value of those services vary in an infinite number of ways and these are subject to change without notice; according to the giver and the receiver, and countless other factors. The custom of paying a fee for a professional service has long been justly honored as a solution; and no other profession can point to a more honorable record, of service to the needy save, perhaps, the clergy.

We are threatened by some politicians with *Federal* standardization of professional services for medicine; and wooed by well-meaning friends and associates to join voluntarily in a Blue Shield Plan, whose aims and principles differ only in degree. This seems harsh but it is, at least, honest. The means of finance may belong to financiers and planners, but the agreement on the nature of the services, and the fees to be paid, in any given instance, is a matter to be settled between the parties involved—and this is a fundamental to a profession.

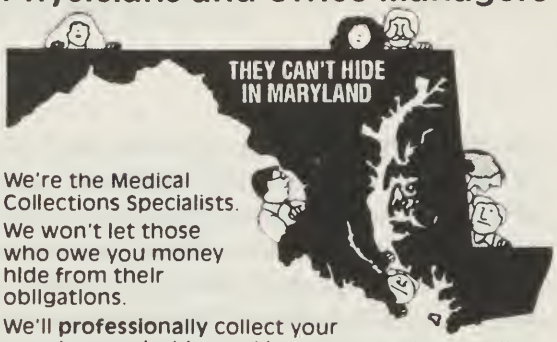
This author is concerned with but one issue; it lies between "Indemnity" and "Service" as the basis for payment of prepaid medical insurance. The indemnity method protects the above defined fundamental and, in no way that is apparent, injures the policy holder. He can readily find treatment at the Service fee levels, *if* these are realistic; all factors being considered, including the momentary economic indices, both general and personal. What sufficient purpose, then, exists, for the profession to catalogue its services and offer at predetermined fixed fees? Let us not lose touch with the people. The arrival at an equitable fee must be a cherished privilege and recognized as a responsibility and a trust, of no less importance than the several other great keystones underlying the relationship between patient and physician. The "Indemnity" feature has desirable elasticity and will limit the endless pressures, conferences and debates, through which one group, and then another, will attempt to alter the details of payment, premiums and eligibility in a fixed-fee service plan.

Let us resist the continuation and expansion of the types of plans which catalogue fees exactly, and provide full prepayment to the consumer. Inflexible to the physicians, taxing the thrifty user in favor of the less scrupulous—the so-called "Service" plans are a long step towards reducing the status of the profession, eliminating the physician as a free agent; and nullifying the value of money as a mode of exchange and a method of saving for future use, the fruits of one's present or past endeavors. Thus, both the subscriber and the physician are injured. The steadily climbing premium costs are mute testimony, and these are but a preview; for the plan administrators cannot forever expect the luxury of claims even as low as now! How long will the private patient continue to build and furnish the hospitals while the Blue Cross patient enjoys a maintenance cost basis? How long will it take us to realize that these are not a few of our patients, but soon will be almost all?

Let us leave no stone unturned in a search for insurance against *catastrophe*, either sudden or chronic. This is the insurance every honest citizen wants. Let us, however, stand as a bulwark against signing the public and the profession to a contract which tends to standardize professional fees; must eventually lead to endless bickering between the representatives of the policyholders, hospitals, and professional groups—each anxious to obtain equity; whilst uncontrollable wastefulness makes a mockery of the entire proceedings!!

OSBORN D. CHRISTENSEN, M.D., D-OG, F.A.C.S.
Dr. Christensen was a delegate from Wicomico County to the House of Delegates of the Medical and Chirurgical Faculty, 1952, vice-president, Medical and Chirurgical Faculty, 1953. ■

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Highlights: Executive Committee and Council Actions

Executive Committee meeting, July 12, 1993

Actions taken

1. Positions, not candidates, will be supported by Med Chi, with candidate support referred to MMPAC (Maryland Medical Political Action Committee).

2. It was noted that candidates may buy a booth at the semiannual meeting to promote their candidacy and that nothing in Med Chi's bylaws prohibits this action—a candidate buying a booth is not a form of endorsement but free enterprise.

3. The Maryland Alliance for Health Care asked Med Chi to provide $5,000 to help with start-up costs for the Community Health Management Information System (CHMIS), which will be operated by the Maryland Foundation for Quality Healthcare (Foundation). The Executive Committee was concerned about membership on the Foundation's board of directors and asked Med Chi's chief executive officer (CEO) and Donald H. Dembo, M.D., president-elect and member of the Maryland Alliance for Health Care, to request that the Foundation's bylaws be amended to reflect that Med Chi provide more physicians to the board than previously noted. The Executive Committee asked that this revision be finalized by July 15 so the Council could vote on the funding request.

4. The Ad Hoc Legislative Enhancement Committee conducted interviews with prospective Med Chi lobbyists. Med Chi's CEO was requested to meet with the four identified candidates and report back to the Executive Committee. The CEO, chief operating officer (COO), and general counsel will report back to the Executive Committee regarding fiscal and operational aspects concerning the lobbyist.

5. Since the Baltimore County amendments to HB 1359 were received after the suspense date, Baltimore County will be notified that its amendments will be properly reviewed and presented to the Executive Committee and House of Delegates in September.

Council meeting, July 15, 1993

1. The Council chairperson reviewed the Council's charges.

2. The Council chairperson stated he would like Med Chi's bylaws to be more coherent and reflective of current Med Chi policy. He noted that the Bylaws Committee, under the chairpersonship of J. Ramsay Farah, M.D., is actively pursuing this.

3. Emeritus membership was granted to Claude L. Bell Jr., M.D. (Anne Arundel), Claudia B. Blair, M.D. (Harford County), Louis W. Doroshow, M.D. (Baltimore County), and Harold Sussman, M.D. (Baltimore City).

4. The recommendation of the Committee on Managed Care and Third-Party Liaison was referred to the Executive Committee for a decision. The committee recommended employing a marketing research firm, selected through competitive bidding, to put together a physician survey to evaluate HMOs (health maintenance organizations), PPOs (preferred provider organizations), managed care companies, and other insurance companies and payers doing business within Maryland. The survey would rank the entities on the basis of general and specific criteria in order of efficiency and effectiveness for Maryland patients.

5. The Maryland Alliance for Health Care asked for $5,000 to fund start-up costs for the Community Health Management Information System (CHMIS). The Council approved the start-up money.

6. The Public Health Committee recommended that Med Chi support the efforts of the Maryland Alliance Against Family Violence and provide $25,000 to be disbursed over a two-year period. Efforts would target physician education and legislation that would be friendlier to physicians who report family violence. The recommendation was approved, and the funding request was referred to the Charitable Education Fund and the Finance Committee.

7. Council approved the Committee on Scientific Activity's recommendations to revise its mission statement and to hold the 1994 annual meeting in Hagerstown on May 12-14, 1994.

8. Med Chi general counsel was instructed to cancel the InforMed contract.

9. Med Chi general counsel was instructed to join the *amicus curiae* brief filed by Blue Cross and Blue Shield of Maryland (BCBSM) participants against BCBSM Board of Directors members and officers to recover BCBSM monies.

10. The Public Relations Committee presented two recommendations to Council:

    a. Component societies should be requested to refrain from advertising [e.g., including component society identification on public service announcements] when individual physicians are being promoted. This recommendation was referred back to the Public Relations Committee.

    b. The feasibility of enhancing the public image of physicians through a major professional public information campaign directed to the public, physicians, and legislators be considered. This recommendation was approved.

11. The Ad Hoc Legislative Enhancement Committee noted that it had interviewed eight lobbyist candidates, and, that at the Executive Committee's direction, the CEO was interviewing the finalists in relation to specific issues. This information is to be brought back to the Executive Committee as soon as it is gathered.

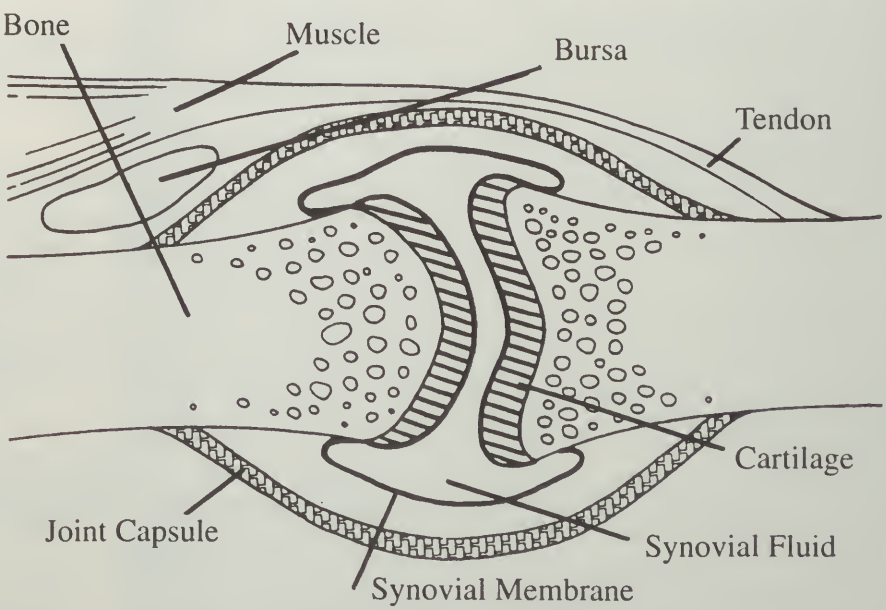
12. Alex Azar, M.D., was elected to complete the unexpired AMA delegate term of Donald "Ted" Lewers, M.D. Carol W. Garvey, M.D., was elected to fill the unexpired AMA alternate delegate term of Dr. Azar.

13. A motion was made by Montgomery County that the Council chairperson appoint an ad hoc committee composed of one Council representative from each Nominating Committee group to organize a retreat to examine Med Chi's structure and operation to determine if they are adequate to meet the needs of physicians and the public in the coming decade. The motion was seconded and passed. The Council chairperson will select an ad hoc committee and charge the committee to report back at the September Council meeting. ■

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✧ **AMA-ERF** (American Medical Association Education and Research Foundation)
Elizabeth Linhardt (Mrs. Elmer) 410-263-2156

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Eva Malouf (Mrs. George, Sr.) 301-277-5885
Daina Tsurumaki (Mrs. Toshi) 301-292-6940

✧ **Bylaws**
Josie Figueroa (Mrs. Augusto) 301-777-1873

✧ **Convention**
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Virginia Levickas (Mrs. Herbert) 410-747-7085
Myrna Goodman (Mrs. Stuart) 301-983-9467
Nancy Warren (Mrs. William) 301-490-0907

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Mildred Taylor (Mrs. Charles) 410-381-0693
Marge Shenasky (Mrs. John) 410-742-4302
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Call for Papers

1994 International Conference on Physician Health
September 14-18, 1994. Ottawa, Ontario, Canada

"Stress: The Profession, the Family and You"

The 1994 International Conference on Physician Health, co-sponsored by the American Medical Association, the Federation of State Medical Boards, the Canadian Medical Association, and the Federation of Medical Licensing Authorities of Canada is scheduled for September 14-18, 1994, at the Ottawa Westin Hotel.

Ottawa is Canada's capital and offers many national museums, over 60 miles of bicycle paths, hiking in Gateneau park, squash courts and swimming at the hotel and golf nearby.

The conference will provide a forum for practitioners and researchers to present recent findings and innovative treatment and education programs in physician health. This conference will address a range of issues, such as AIDS, HIV, problems related to aging, mental illness, substance abuse and physical disabilities and limitations, including those caused by general medical conditions. Possible topics for presentation include: presentation and treatment of health problems among physicians, the impact of disorders on physicians' families and practices, medical-legal issues facing hospital administrations and licensing boards, and material on health promotion and disease prevention. *Abstracts which address issues related to these topics (i.e., prevention, diagnosis, treatment, rehabilitation), but not dealing specifically with physicians are also welcome.*

Three types of presentations regarding these physician health issues are invited:

- **Poster Presentations**
  Written presentations of data-based research, epidemiological research, or program descriptions.
- **Paper Sessions**
  Oral presentation of scientific, data-based findings relative to the topic of physician health.

  Abstracts for poster presentations and paper sessions should contain an introductory statement on the significance of subject matter. Description of methods, results, and conclusions should follow the introductory statement.
- **Workshops**
  Training or instructional presentations, designed to improve specific skills of persons who work in the area of physician health.

  Abstracts for workshops should contain information on the program's intended audience, goals, teaching strategies, and materials. Evaluation data should be summarized

Abstracts may not exceed 200 words. Any abstracts exceeding that length will be rejected. Abstracts should be typed, double spaced, and mailed (not faxed). Four copies of the abstract should be sent, along with one self-addressed, stamped envelope. All submissions must list the primary and secondary authors and their professional affiliations. Telephone number and address of primary author must also be included.

Submissions *must* be received by February 1, 1994.

Abstracts will be submitted for blind review. Abstracts will be judged on their applicability to the conference topic area and their scientific merit. The decisions of the blind reviewers will be communicated to the abstract's primary author by April 1, 1994.

All presenters are expected to register for the conference at the AMA member rate. We are unable to provide any financial support for presenters. Presenters will also be responsible for their own transportation and hotel expenses, as well as making all reservations for same.

Send all materials to:
Elaine M. Tejcek, Physicians Health Foundation, American Medical Association, 515 N. State Street, Chicago, IL 60610.

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In Memoriam

John Bordley, M.D.

JOHN BORDLEY, M.D., an otolaryngologist, died July 12, 1993, at the age of 90 following a heart attack at his Baltimore home. Dr. Bordley headed the Johns Hopkins Department of Otolaryngology for 15 years until his retirement in 1969. A graduate of Yale University and the Johns Hopkins School of Medicine, he served an internship and residency at Union Memorial Hospital before completing his residency at Hopkins. A lieutenant colonel during World War II, Dr. Bordley was assigned to the 118th General Hospital. He also held visiting teaching posts at hospitals in 10 foreign countries. Named Andelot Professor Emeritus of Otolaryngology and Otology at Hopkins in 1969, he also served as professor of environmental medicine in the Division of Audiology and Speech in the Johns Hopkins School of Hygiene and Public Health. In 1969, he was named vice-chairperson and executive director of the American Council of Otolaryngology. A consultant in the establishment of the Boys Town National Institute for Communicative Disorders in Children, Dr. Bordley received the Boys Town Outstanding Citizen Award in 1982. In 1981, he received a US presidential citation, the American Otological Society's Award of Merit, and the International Federation of Otorhinolaryngology's Gold Medal. Honorary president of the VIII World Congress of Otolaryngology in 1985, he had also chaired the Society for Crippled Children's medical advisory committee, was a member of the Institute for Sensory and Brain Research, and had served on the President's Committee for Employment of the Handicapped. The John E. Bordley Chair in Otolaryngology was established at Hopkins in 1990.

Henry F. Graff, M.D.

HENRY F. GRAFF, M.D., an ophthalmologist from Hagerstown, died April 14, 1993. Born in West Virginia, he graduated from Marietta College in Ohio and the University of Michigan Medical School in Ann Arbor. He practiced ophthalmology in Baltimore for 20 years before entering practice with his brother in Hagerstown in 1948. Dr. Graff was state supervising ophthalmologist in the Public Assistance to the Needy Blind Program from 1937 until he retired in 1964. A diplomate of the American Board of Ophthalmology, he was also a member of the American Medical Association. Dr. Graff was a former associate and assistant professor of ophthalmology at the University of Maryland and chief of the Ophthalmological Clinic. A clinical assistant at the Wilmer Ophthalmic Clinic for 10 years, he was a member of St. John's Episcopal Church and a former member of the Kiwanis Club of Baltimore and of Hagerstown.

George Groleau, M.D.

GEORGE GROLEAU, M.D., a general practitioner from Howard County, died May 31, 1993, following a heart attack at his Sykesville home. Dr. Groleau, a native of Rochester, Pennsylvania, practiced in Elkridge from 1949 until he retired in 1991. A member of the Elkridge Rotary Club, Westminster Lodge of the Moose, and St. Paul's United Methodist Church in Sykesville, he received his professional education at Washington and Jefferson College in Washington, Pennsylvania, and the Temple University School of Medicine in Philadelphia. Dr. Groleau, who served in the US Army Medical Corps during World War II, was 71.

Albert I. Mendeloff, M.D.

ALBERT I. MENDELOFF, M.D., a gastroenterologist, died March 15, 1993, of leukemia at the age of 75. Dr. Mendeloff had been physician-in-chief at Sinai Hospital from 1955 to 1980—Sinai's first physician-in-chief. A classicist, with intellectual pursuits that extended to art, music, and the humanities (he read Latin and Greek), Dr. Mendeloff had an international reputation in epidemiologic gastroenterology. President of the Shriver Hall Concert Series for 12 years, he was also full professor of medicine at Johns Hopkins. He created the biochemistry research laboratory at Sinai in 1958. When he retired at age 68, he served as a senior consultant at the Loch Raven Veterans Administration Hospital, and was editor of the *American Journal of Clinical Nutrition* for 10 years. In 1990, Dr. Mendeloff became the first recipient of Sinai Hospital's Department of Medicine's Distinguished Physician Award.

Harry A. Miller, M.D.

HARRY A. MILLER, M.D., a retired diagnostic and therapeutic radiologist, died July 17, 1993, of hydrocephalus. A native of Baltimore, Dr. Miller graduated from the Johns Hopkins University and the medical school of what is now Case Western Reserve University in Cleveland, Ohio. He completed an internship at the Walter Reed Army Medical Center and a residency at Montefiore Hospital in New York City. He was also a fellow at the Curie Institute in Paris. Dr. Miller entered private practice in 1935 and was on the staff of Mercy Medical Center and Sinai Hospital. He served as a consultant to the Fort Howard Veterans Hospital. As a lieutenant colonel in the

US Army Medical Corps during World War II, he was radiologist-in-chief at army hospitals in the United States and England. Dr. Miller, who was 87, retired 15 years ago.

Norman Oliver, M.D.

NORMAN OLIVER, M.D., an orthopaedic surgeon, died July 21, 1993, at Easton Memorial Hospital from complications of a stroke. Born in New York, Dr. Oliver graduated from Long Island University and Long Island College of Medicine. He completed his medical internship and residency at Morrisania Hospital in New York. Dr. Oliver was chief surgeon at a South Pacific evacuation hospital during World War II. After the war, he practiced at Fort Howard and Children's hospitals in Baltimore before opening a private practice in Silver Spring. He served on the staff of Holy Cross, Suburban, and Washington Adventist hospitals. A diplomate of the Pan American Medical Society and a member of the American Academy of Orthopaedic Surgery and the American Medical Association, Dr. Oliver retired in 1985 and moved to St. Michaels, Maryland. He was 81.

Martin E. Strobel, M.D.

MARTIN E. STROBEL, M.D., who was 74, died July 14, 1993, from heart failure. A general practitioner in Reisterstown from 1948 until his retirement in 1981, he was a graduate of Gettysburg College in Pennsylvania and the University of Maryland School of Medicine. Raised in Frederick, Dr. Strobel performed an internship at University Hospital and a residency at Maryland General Hospital before serving in the US Army during World War II. Dr. Strobel was former president of the Baltimore City Medical Society, the Maryland Orchid Society, and the Reisterstown Kiwanis Club. He moved to South Carolina in 1985.

No information was available at press time for the following member:

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(Affiliate), April 23, 1993 ■

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Clinton accepts AMA invitation to study Hawaiian health system

Hillary Rodham Clinton saw many key AMA system reform elements in action during her trip to Hawaii.

The first lady, accepting an AMA invitation, participated in a July 13 round table discussion on Hawaii's health care system, which is considered the "best working example" of system reform.

The AMA, Hawaiian Dept. of Health and Hawaii Medical Assn. coordinated the meeting with Hillary Clinton.

She took the opportunity to speak to about 30 Hawaiian physicians. Mrs. Clinton learned firsthand how state industry and government are working together in the free market to provide quality care to all its citizens, while keeping costs down.

During a June 30 speech in San Francisco, AMA Executive Vice President James S. Todd, MD, encouraged the Clintons to take a look at Hawaii's health care system -- a working example of the AMA's reform blueprint, Health Access America.

"To see our proposal at work, all one has to do is look at Hawaii, where key elements of the AMA's proposal have been at work for several years with a great deal of success," Dr. Todd said. "The Hawaii plan is real, it's working, and it's doing what the AMA and everyone on the mainland wants to do—help our patients."

After attending the economic summit in Tokyo, the president and first lady vacationed in Hawaii before returning to the White House.

Responding to Dr. Todd's speech, White House officials contacted the AMA to accept its invitation for the first lady to study the Hawaiian health system during her visit.

Hillary Clinton planned to stay in Hawaii for the remainder of the week to get an even more in-depth look at the state's health care system.

The AMA, which has been promoting its reform plan since 1990, calls for insurance reform, Medicaid and Medicare reforms, cost containment, professional liability reforms and mandated employer health coverage.

Prepared by the Department of Communications Services. For information, call 800 AMA-3211, ext. 4416.

AMA embarks on new fee-for-service approach

The AMA's Board of Trustees is currently studying a detailed plan to enable fee-for-service physicians to offer predictable costs—a benefit usually attributed to managed care plans. The Association launched this critical new initiative to maintain fee-for-service practices in its drive for health system reform.

Relative values of the resource-based relative value scale could form the basis for public and private sector physician payment, with physicians and payers setting their own dollar conversion factors, which are multiplied under the RBRVS to calculate the fee.

Under the Board's approval, widely publicized conversion factors would allow patients to easily compare the costs of physicians' services. Widely publicized payor conversion factors would allow patients to accurately estimate potential out-of-pocket costs as well as the adequacy of health insurance benefits.

For patients, this means free choice of physician, competitive premiums and predictable out-of-pocket expenses. For physicians, this means that strengthened market forces will regulate their fees rather than government price controls.

Lobbying helps scale back Medicare cuts

The U.S. Senate voted to reduce Medicare cuts in the finance committee's version of the reconciliation by $9 billion. This action was led by Sens. Paul Wellstone (D, Minn.), Tom Harkin (D, Iowa) and Barbara Mikulski (D, Md.).

The scaling back of the Medicare cuts was in large part due to AMA and medical society lobbying efforts.

Another important AMA action that helped convince Senate leadership to offer the amendment reducing the cuts was an AMA letter to the full Senate. The letter urged each senator to protect the Medicare and Medicaid programs by limiting excessive spending reductions and avoiding micromanagement of the programs.

Sen. Wellstone's staff told the AMA that its efforts greatly contributed to the victory to reduce the Medicare cuts.

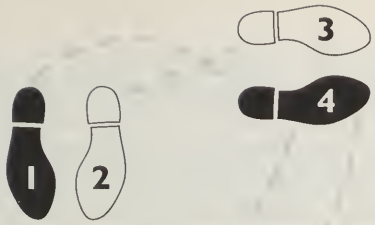
AMA sues DEA over fees

In June, the AMA, along with other co-plaintiff medical organizations, sued the Drug Enforcement Administration over the new excessive registration fees imposed on physicians.

The DEA's Final Rule announced in March nearly quadrupled fees for those who prescribe, dispense, manufacture or distribute controlled substances to fund a drug Conversion Control Program.

Although most physicians are willing to help stop illegal diversion of controlled substances, the DEA's final rule does not define the program's scope or operations, explain the relationship between the fee and program activities, justify the large fee increase or justify fee distribution.

Prepared by the Department of Communications Services. For information, call 800 AMA-3211, ext. 4416.



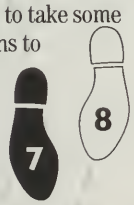
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Interactions
Medical Staff Leadership Conference on Managing Change

October 1-3, 1993 Naples, Florida

We can't dance around the issue any longer. Health system reform is occurring at a fast pace. And it's going to take some fancy footwork for physicians to maintain autonomy and control within their practices.

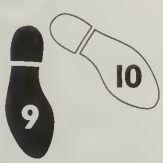


Master the moves that will help you excel in this environment by attending the fourth annual Interactions Medical Staff Leadership Conference: Managing Change. Sponsored by the American Medical Association (AMA), in cooperation with the Medical Association of Georgia and the Florida Medical Association, this comprehensive three-day conference is designed specifically for new and experienced medical staff leaders.

Physician leaders will benefit by:

- Learning how to hone their leadership skills
- Gaining a greater understanding of health policy and medical practice issues
- Acquiring the knowledge and tools to deal with the changes surrounding health system reform

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  The letter should include a statement to the effect that all authors have participated in the conception and design of the work and in the writing of the manuscript, and that they take public responsibility for it. The authors should attest to the validity and legitimacy of the data, and acknowledge that they have reviewed the final version of the manuscript and approve it for publication.

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  All material, including references, tables, and legends, must be double-spaced. Pages should be numbered. (All abbreviations should be spelled out on first use.) The original manuscript plus one copy should be submitted on standard (8.5" x 11") bond paper. If at all possible, an IBM-compatible disk should be included, with the manuscript entered in a WordPerfect, Multimate, Wordstar, or ASCII format; the transmittal letter should identify the format used.

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  1. Stevens MB. The clinical spectrum of SLE. Md Med J 1991; 10:875–85.
  2. Ropes MW. Characteristics, manifestations, and pathologic findings. In: Ropes MD, ed. Systemic Lupus Erythematosus. Cambridge, MA: Harvard University Press. 1976; 50–4.

- ***Tables***—Tables should be typed on separate sheets of paper, be numbered, and have a brief descriptive title. Data presented in tables should be self-explanatory and should supplement, not duplicate, the text; the Editor reserves the right to edit tables. Authors should be sure that statistics are consistent in both tables and text.

- ***Illustrations***—Illustrations include material that cannot be set in type. Photographic material must be submitted as high-contrast, glossy prints. Drawings and graphs must be done professionally in india ink on high-grade white drawing paper or be computer generated. Identification—including figure number, the title of manuscript, the name of corresponding author, and arrow indicating top—should be typed on a gummed label and affixed to the back of each illustration. Legends for illustrations should be typed on a separate page with numbers corresponding to those on the photographs or drawings. Recognizable photographs of patients are to be masked and should carry with them written permission for publication. Cost of printing color photographs must be borne by the author.

Checklist

- ☐ Original manuscript and one copy.
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- ☐ Everything double-spaced.
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  Accepted manuscripts become the permanent property of the *MMJ* and are subject to copy editing. (The *Chicago Manual of Style* and the unabridged *Random House Dictionary of the English Language* are used as style guides.) The corresponding author is sent a reprint order form and galley proofs. S(he) then has 48 hours in which to make minor changes and clear all corrections and changes with co-authors; if proofs are not returned by the specified date, they will be considered approved as typeset. ■

University of Maryland

For each course, additional information may be obtained by contacting the Program of Continuing Education, University of Maryland School of Medicine, Room 14-011, BRB, 655 W. Baltimore St., Baltimore, Maryland 21201 (410-328-3956) or by calling the phone number listed after a specific program. FAX 410-328-3103.

Cardiovascular risk factors in the elderly, medical and pharmacologic management, at the Baltimore Grand, Baltimore, Maryland. 7 Cat 1 AMA/PRA credits. Fee: $60 physicians. Info: Reba Cornman, 410-706-4327. — **Oct. 5**

Miscellaneous meetings

Imaging the augmented breast, sponsored by the Baltimore City Medical Society. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. — **Sept. 2**

1993 Med Chi semiannual meeting, at the Sheraton Ocean City Resort and Conference Center, Ocean City, Maryland. Info: Vivian Smith, 410-539-0872 or 800-492-1056. — **Sept. 10–12**

The decade of the brain: An international conference, sponsored by the George Washington University, at the Omni-Shoreham, Washington, DC. 28 Cat 1 AMA/PRA credits. Fee: $550 physicians; $330 residents and fellows; $250 other health professionals. Info: John F. Vargo, 202-994-4285. — **Sept. 11–14**

5th annual trauma conference, sponsored by the Peninsula Regional Medical Center, at the Sheraton Ocean City Resort and Conference Center, Ocean City, Maryland. Info: Darlene Kwiatkowski, 410-543-7328. — **Sept. 16–17**

14th international congress of lymphology, sponsored by the International Society of Lymphology (ISL). Part 1: "Frontiers in Lymphology" at the Hyatt Regency, Baltimore, Maryland. Part 2: "Lymphology in 1993" at the Ramada Renaissance Techworld, Washington, DC. Info: Grace Wagner, Program Coordinator, 602-626-6118. — **Sept. 20–26**

Congenital heart disease in adolescents and adults, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. — **Sept. 27–29**

Interventional echocardiography: Transesophageal, exercise, pharmacologic, and intravascular, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. — **Sept. 30–Oct. 2**

International liver symposium, sponsored by the George Washington University, at the Marriott Crystal Gateway Hotel, Arlington, Virginia. 14 Cat 1 AMA/PRA credits. Fee: $350. Info: Hattie Johnson, 202-687-8735. — **Oct. 1–3**

Clinical cardiac electrophysiology, pacemakers, and cardioverter-defibrillators, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. — **Oct. 4–7**

Causes of the medical malpractice crisis, sponsored by the Baltimore City Medical Society. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. — **Oct. 7**

Gastroenterology board review course, sponsored by the George Washington University, at the Marriott Crystal Gateway Hotel, Arlington, Virginia. 42 Cat 1 AMA/PRA credits. Fee: $650 physicians; $500 residents and fellows. Info: Daniel E. Reichard, 202-994-4285. — **Oct. 9–13**

Medical oncology board review course, sponsored by the George Washington University, at the Ritz-Carlton, Pentagon City, Virginia. 38 Cat 1 AMA/PRA credits. Fee: $695 physicians; $500 residents and fellows. Info: John F. Vargo, 202-994-4285. — **Oct. 9–13**

Miscellaneous meeting (continued)

Clinical applications of Doppler and transesophageal echocardiography, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. — **Oct. 14–16**

New techniques and concepts in cardiology, sponsored by the American College of Cardiology, at the Hyatt Regency Hotel, Washington, DC. 16 Cat 1 AMA/PRA credits. Info: 1-800-257-4739. — **Oct. 21–23**

Nuclear cardiology: A case study approach, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. — **Oct. 21–23**

Cancer in women conference, at the Greater Baltimore Medical Center (GBMC), Baltimore, Maryland. Info: Celeste Morrissey, 410-828-3670. — **Oct. 21 & 28 and Nov. 4 & 11**

Vascular radiology conference, at the Greater Baltimore Medical Center (GBMC), Baltimore, Maryland. Info: Celeste Morrissey, 410-828-3670. — **Oct. 23**

7th annual national disability management conference and exhibit, sponsored by the Washington Business Group on Health, at the Crystal Gateway Marriott, Arlington, Virginia. Info: Kristina Tanasichuk, 202-408-9320. — **Oct. 25–26**

Topics in clinical rheumatology: An arthritis update for internists, family practitioners, orthopaedists, rheumatologists, other primary care practitioners, and allied health professionals, sponsored by the Arthritis Foundation, Maryland Chapter, at the Stouffer Harborplace Hotel, Baltimore, Maryland. Cat 1 AMA/PRA credits available. Fee: $50. Info: J. Karen Krug, 410-602-0160. — **Oct. 28**

Cases in echocardiography: TEE, Doppler and stress—Interpretation and clinical decision making for the advanced echocardiographer, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. — **Oct. 28–30**

Cardiology in women, at the Greater Baltimore Medical Center (GBMC), Baltimore, Maryland. Info: Celeste Morrissey, 410-828-3670. — **Oct. 29**

The future of integrated health care systems conference, sponsored by The Healthcare Forum and Inova Health System, and in part by a grant from KPMG Peat Marwick, at the Hyatt Regency, Reston, Virginia. 13.25 Cat 1 AMA/PRA credits. Info: 415-421-8810. — **Nov. 8–11**

Cardiac auscultation for physician assistants, nurse practitioners, and cardiac nurses, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. — **Dec. 1–3**

Advanced echocardiography: Case studies and concepts, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. — **Dec. 13–15**

Continuously throughout the year

Fluorescein angiography conference, sponsored by the Retina Center, St. Joseph Hospital, Baltimore, Maryland, first and third Mondays of each month; 8:00-9:00 am. Fee: none. Info: R. Classon, 410-337-4500.

Shady Grove Adventist Hospital

9901 Medical Center Drive, Rockville, Maryland. Info: 301-279-6115.

Various treatment perspectives for the anxious patient	**Aug. 5**
Treatment of nosocomial pneumonia	**Aug. 12**
New vascular interventional techniques & spiral CT scanning	**Aug. 19**
Tumor conference	**Aug. 26**

The Johns Hopkins Medical Institutions

All courses at the Thomas B. Turner Building unless otherwise indicated. For information on continuing medical education activities, contact the Office of Continuing Education, 720 Rutland Ave., Baltimore, Maryland 21205 (410-955-2959).

2nd annual update on obstetric anesthesia plus an optional fiberoptic airway management workshop, at the Hyatt Regency Inner Harbor, Baltimore, Maryland. 12 Cat 1 AMA/PRA credits. Fee: $275 physicians; $175 CRNAs; $75 residents and fellows. **Aug. 21–22**

Pediatrics for the practitioner—Update 1993. Cat 1 AMA/PRA credits available. **Sept. 9–10**

7th annual core content of emergency medicine: A comprehensive review, at the Marriott Hotel, Baltimore-Washington International Airport, Baltimore, Maryland. Cat 1 AMA/PRA credits available. Fee $995. **Sept. 10–16**

22nd annual diagnostic ultrasound in gynecology and obstetrics and abdomen, at the Stouffer Harborplace Hotel, Baltimore, Maryland. 16.5 Cat 1 AMA/PRA credits. Fee: physicians: 3 days, $400; 2 days, $300; 1 day, $150. **Sept. 17–19**

Rising to the challenge: Crisis intervention in the critical care setting. Cat 1 AMA/PRA credits available. Fee: $75. **Oct. 4**

19th annual topics in gastroenterology and liver disease. Cat 1 AMA/PRA credits available. Fee $495 physicians; $250 residents and fellows. **Oct. 6–8**

35th annual Emil Novak memorial course. 45 AMA/PRA credits; 53 ACOG cognates ACOG. Fee: $675 physicians; $475 residents, fellows, and allied health professionals. **Oct. 18–23**

Diabetic retinopathy. 8 Cat 1 AMA/PRA credits. Fee: $200 physicians; $100 residents, fellows, and allied health professionals. **Oct. 29**

Practical management of the uveitis patient. 8 Cat 1 AMA/PRA credits. Fee: $200 physicians; $100 residents, fellows, and allied health professionals. **Oct. 30**

Ethics and politics related to clinical trials. Cat 1 AMA/PRA credits available. Fee: TBA. **Nov. 3–4**

Progress in pediatrics. 11 Cat 1 AMA/PRA credits. Fee: $140 physicians; $80 residents and fellows. **Nov. 5–6**

Update on sinusitis. Cat 1 AMA/PRA credits available. Fee: TBA. **Nov. 8**

Continuously throughout the year

Visiting preceptorship in pediatric critical care medicine. Ongoing five-day preceptorship by appointment. 40 Cat 1 AMA/PRA credits. Fee: $600.

Continuously throughout the year (continued)

The department of radiology and radiological sciences offers several courses in abdominal and obstetrical ultrasound. Info: P. Williams, 410-955-3169.

Visiting physicians. Offered throughout the year for experience in the lab and participation in read-in sessions; by appointment only. 40 Cat 1 AMA/PRA credits. Fee: $500.

Johns Hopkins medical grand rounds. Accredited audiovisual continuing education series of case discussions for clinicians; 30 topics per year in five bimonthly programs. Individual and group subscriptions. 40 Cat 1 AMA/PRA credits. Info: 410-955-3988.

PHYSICIAN'S RECOGNITION AWARD

During June 1993, the physicians listed below received the American Medical Association (AMA) Physician's Recognition Award. Established in 1968, the award's purpose is to encourage physician participation in continuing medical education and to recognize those physicians who have voluntarily completed programs of continuing medical education.

Dara Shahriar Afshar
Gary Blair Anderson
Bibhas C. Bandy
Denise Marie Bayuszik
Richard Berkowitz
Brian Clifford Carty
William Francis Colliton
Joseph Henry Cutchin
Philip Pintor Felipe
William F. Fritz
Timothy Bruce Gilbert
Morton Falk Goldberg
Jawad Ul Hasnain
Mohammed Haziq
John Hopewell Hebb
Harry A. Horstman
Edwin Kirk Huang
David Franklin Jaffe
Don Robert Johnson
Gerald Samuel Johnston
John Francis Keiser
Michael Louis Kemer
Ahsan Saeed Khan
Beng Cheah Light
Andrew Douglas Logue
Allan Harris Macht
Mehrdad Massumi
Catherine A. North
Robert John Oglesby
Stephen Louis Ondra
Shannon Connor Phillips
Sharon Mae Pusin
Bannister Lee Raines
Gustavo Restrepo
Mark S. Schnitzer
Dean Schuyler
Elizabeth Orr Segal
Eric Zachary Silfen
Joseph Richard Tiralla
Sarah Varghese
Lillian S. Vlalukin
Isaac Weiszer
Thomas Edward Wiswell

William Donald Schaefer - Governor of Maryland

DHMH Maryland Department of Health & Mental Hygiene

Nelson J. Sabatini - Secretary
Department of Health & Mental Hygiene

J. Mehsen Joseph, PhD - Director
Community Health Surveillance & Laboratories Admin.

Ebenezer Israel, MD, MPH- Director
Epidemiology & Disease Control Program

EPIDEMIOLOGY & DISEASE CONTROL PROGRAM
201 W. Preston Street, Baltimore, Maryland 21201 (410)225-6700

August, 1993

Selected Communicable Diseases in Maryland in 1992 (Continued)

HAEMOPHILUS INFLUENZAE DISEASE (81)

1.7/100,000 (U.S. 0.5/100,000)

The number of cases of invasive *Haemophilus influenzae* disease reported in Maryland from 1988 through 1992 and by jurisdiction is shown in Table 1 (see July, 1993 issue). Reported cases of *H. influenzae* disease doubled in 1992, compared to 1991 when 40 cases were reported. Thirty-eight percent of all cases occurred in Baltimore City; 16% and 12% were reported from Prince George's and Baltimore counties, respectively. The highest rate per 100,000 population (8.6) was noted in Dorchester County, followed by the rate in Baltimore City (4.2).

The male to female ratio was 0.9:1.0. The ratio of whites to blacks was 1.8:1.0. Figure 3 presents the number of cases from 1987 to 1992 by age group and illustrates the continued and remarkable decline of the illness among children, especially those 3 to 17 months old. Figure 3 shows also the increase of cases reported among persons older than 9 years of age. In 1992, 43 (53.1%) of the reported cases were adults, 20 years of age and older. The highest incidence rate per 100,000 population (6.6) occurred in children, 0 to 4 years of age, followed by the incidence rate in those 70 years and older. Eleven cases were reported among infants less than 2 months of age.

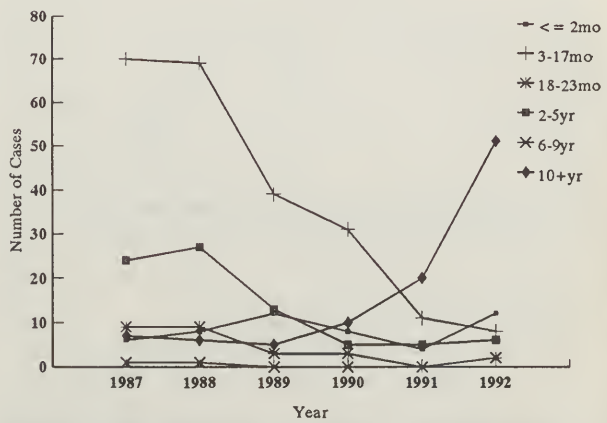


Fig 3. Haemophilus influenzae disease. Cases reported by age group, Maryland, 1987-1992.

Active surveillance for invasive *H. influenzae* disease through hospital infection control practitioners and medical laboratories, which began in November, 1991, continued through 1992. This surveillance and laboratory audits in 1992 is believed to have contributed to the increase of reported cases, especially among adults.

H. influenzae caused the following types of illness: 45 (55.6%) bacteremia, 15 (18.5%) pneumonia, 6 (7.4%) meningitis, 2 (2.5%) cellulitis, 1 (1.2%) peritonitis, 1 pericarditis, 1 epiglottitis, 1 arthritis, and 9 (11.1%)

other infections. Thirteen patients died (for a case fatality rate of 16%), 61 survived, and the outcome for 7 cases is unknown.

H. influenzae isolates from 65 patients showed that 31 (47.7%) were resistant to ampicillin, an increase from 32% in 1991 but still not as high as 57% in 1990.

HEPATITIS A (254)

5.2/100,000 (U.S. 8.4/100,000)

The trend of hepatitis A from 1983 to 1992 is illustrated in Figure 4. The incidence rate in 1992 did not change from the rate in 1991. The number of cases by jurisdiction is shown in Table 1 (see July, 1993 issue). Fifty-five percent of all cases in Maryland was reported from the Baltimore metropolitan area. Baltimore City (89 cases) had the highest rate per 100,000 population (12.1) in the State, followed by Baltimore (7.3), Talbot (6.8), and Anne Arundel (6.2) counties. Hepatitis A did not have a marked seasonal pattern, except for a slight preponderance of illness in the late summer and the autumn.

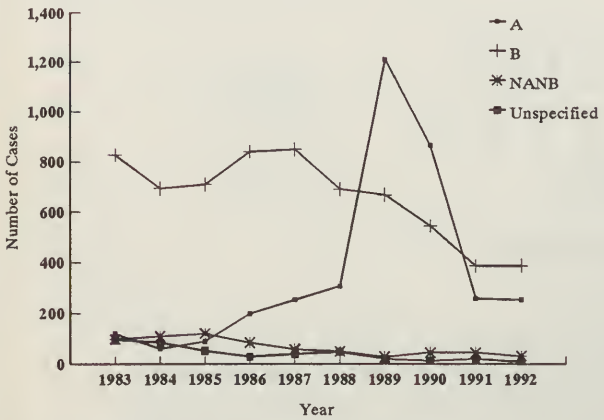


Fig 4. Hepatitis (A, B, NANB, and Unspecified). Cases reported, Maryland, 1983-1992.

The male to female ratio was 1.2:1.0. The ratio of whites to blacks was 6.3:1.0; 15 cases were Asian, 3 were Hispanic, 5 other race, and the race of 35 (13.8%) was not specified. The rate in whites was 5.0/100,000 and the rate in non-whites was 3.3. Age-and sex-specific rates per 100,000 population are presented in Figure 5. The highest incidence rates, 9.4 and 9.2, occurred in males, 30 to 39, and 20 to 29 years of age , respectively. The highest rates among females were noted in age groups 15 to 19 (8.7), 10 to 14 (8.4) and 20 to 29 (8.1) years.

Among the cases with known sex and race (219), non-white (excluding black) females had the highest rate (7.4), followed by non-white (excluding black) males (6.8), white male (5.7), and white female (4.3).

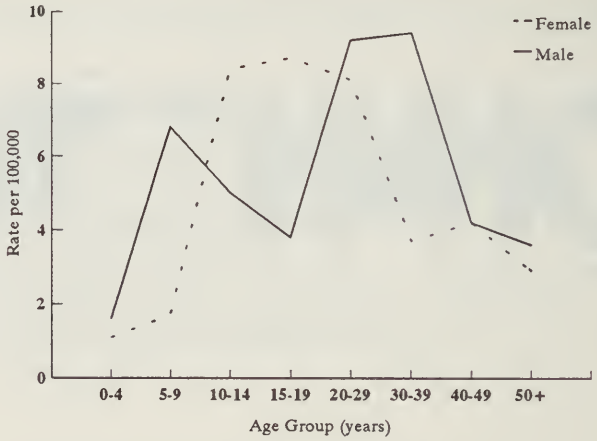


Fig 5. Hepatitis A. Incidence rates by age group and sex, Maryland, 1992.

Of the 125 adults with known occupation (excluding retired, unemployed, homemakers, etc.), 6 (4.8%) were food handlers, 3 (2.4) were health care providers, and 1 (0.8%) was a child day care facility worker.

Of the 114 cases with known workplace, school, child care facility, etc., 6 (5.3%) were working in foodhandling businesses, 4 (3.5) in nursing homes, and 1 (0.9%) in a child care facility; 1 (0.9%) attended a child care facility.

A known or suspected source of infection was reported for 78 (30.7%) of the cases. Of these, 31 (39.7%) had contact with a confirmed or suspected hepatitis A case, 16 (20.5%) had handled and/or consumed potentially contaminated food, 13 (16.7%) were injectable drug users (compared to 12.1% in 1991, 17.9% in 1990, and 22.7% in 1989), 11 (14.1%) were refugees/immigrants from developing countries; 1 (1.3%) had contact with child or employee in nursery or a child care center, and 6 (8.0%) had other exposures.

HEPATITIS B (388)

8.0/100,000 (U.S. 5.9/100,000)

The trend of acute hepatitis B in Maryland during the past 10 years is reflected in Figure 4. The decline which started in 1987 leveled off in 1992; the incidence in 1992 remained the same as in 1991. The number of cases by county is shown in Table 1 (see July, 1993 issue). Baltimore City reported 36.1% of all cases in the State, for a rate of 19.0 per 100,000 population. This represents an increase from the rate in 1991 (18.1), but still not to the level in 1989 and 1990 when Baltimore's rates were 39.5 and 26.1, respectively. Other counties with high rates were Dorchester (16.2), Somerset (12.9), Caroline (10.8), Worcester (10.1), and Prince George's (9.0).

No seasonal pattern was observed. The male to female ratio was 1.5:1.0. The incidence rate in males was 9.9/100,000 and the rate in females was 6.1/100,000. The ratio of whites to blacks was 0.9:1.0; 3 cases were

Hispanic, 2 Asian, and the race of 71 (18.3%) was not specified. The rate per 100,000 population in blacks (13.9) was 3.2 times higher than the rate in whites (4.3). The rate in black males, 35 to 39 years old, was 40.9.

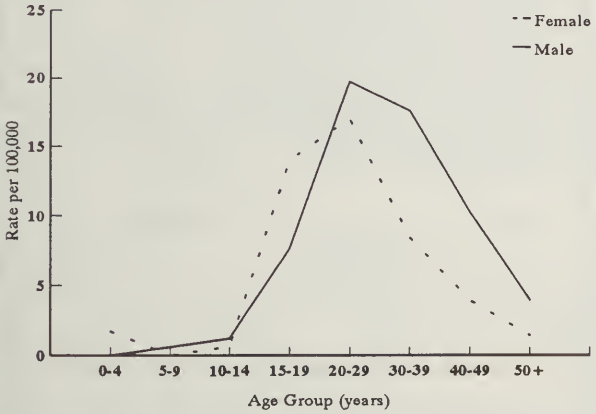


Fig 6. Hepatitis B. Incidence rates by age group and sex, Maryland, 1992.

The incidence rates per 100,000 population by age group and sex are presented in Figure 6. The highest rates were observed in males, 20 to 39 and in females, 20 to 29 years of age.

Of the 94 adults with known occupation (excluding retired, unemployed, homemakers, students, etc.) only 4 (4.3%) were health care providers with direct patient contact and 3 additional cases were known to have been employed in a hospital and an institution for mental/developmental disabilities.

Information on exposure during the 6 months prior to onset of illness and the probable source of infection was available for 107 (27.6%) cases. Of these, 46 (43.0%) admitted illegal drug use (compared to 33.0% in 1991, 31.0% in 1990, and 46.5% in 1989), 18 (16.8%) had heterosexual and unspecified sexual exposure, 17 (15.9%) had contact with a confirmed or suspected hepatitis B case, 6 (5.6%) had blood transfusion, 5 (4.7%) were refugees or immigrants from developing countries, 3 (2.8) had eaten raw shell fish, 2 (1.9%) had had a tattoo, 1 (0.9%) had a needle stick injury, 1 (0.9%) had dental work, 8 (7.5%) had other exposures.

HEPATITIS NANB (31)

0.6/100,000 (U.S. 2.2/100,000)

The incidence rate of acute NANB (non A/non B) hepatitis in 1992 declined from the rate in 1991 (0.9/100,000). The reported cases decreased by 31.1%. The 10 year trend of NANB hepatitis in Maryland is illustrated in Figure 4. The number of cases by jurisdiction is shown in Table 1 (see July, 1993 issue). More than half of the cases (54.8%) occurred in Baltimore County and Baltimore City. The highest rate per 100,000 population (5.1) was noted in Worcester County, followed by the rate in Talbot County (3.4).

The male to female ratio was 0.9:1.0. The rates per 100,000 population in males and females were 0.3 and 0.6, respectively. The ratio of whites to blacks was 1.2:1.0. The rate per 100,000 population in blacks (1.2) was more than double the rate in whites (0.5).

There were no cases less than 20 years of age. Patients, 30 to 49 years of age, had the highest rates, including black males, 35 to 39, and black females, 40 to 44 years of age, whose rates were 6.5 and 6.2, respectively.

The suspected source of infection during the 6 months prior to onset of illness was reported for 15 (48.4%) of the cases. Of these, 10 (66.7%) were illegal drug users (compared to 52.2% in 1991, and 50.0% in 1990), 1 (6.7%) had received blood or blood products by transfusion, 1 had been exposed to a NANB case, 1 had sexual exposure, 1 had a needle stick, and 1 had had a tattoo.

LEGIONELLOSIS (39)

0.8/100,000 (U.S. 0.5/100,000)

Legionellosis increased slightly from 1991 when 34 cases were reported. Fifteen of the 24 jurisdictions in Maryland reported cases; the numbers by county are shown in Table 1 (see July, 1993 issue). More than one third of all cases (35.9%) were reported from Baltimore City (6 cases) and Baltimore County (8 cases). Washington County (3 cases), as in previous years, had one of the highest rates in the State (2.5/100,000). No marked seasonality was noted.

The male to female ratio was 0.7:1.0. Females had a higher incidence rate (0.9) than males (0.7). The ratio of whites to non-whites was 3.4:1.0; the race of 4 cases was unknown.

Ages ranged from 23 to 86 years (mean 59, median 60 years); the age of 1 person was unknown.

The incidence rate per 100,000 population by age group and sex is shown in Figure 7.

Information on possible source of exposure in the 2 weeks before onset of illness and/or underlying medical conditions was available for 19 (48.7%) cases. Of these 9 (47.4%) were smokers of more than 10 cigarettes per day (including 2 who recently had quit smoking), 4 (21.1%) were undergoing systemic corticosteroid treatment, 2 (10.5%) had visited a hospital and an emergency room, 2 (10.5%) had cancer, 1 (5.3%) had diabetes mellitus, and 1 had history of out-of-state travel. In addition, 10 patients had indicated during the investigation no possible source of exposure nor predisposing factor.

Six deaths occurred for a case fatality rate of 17.6%; the outcome for 5 patients was unknown.

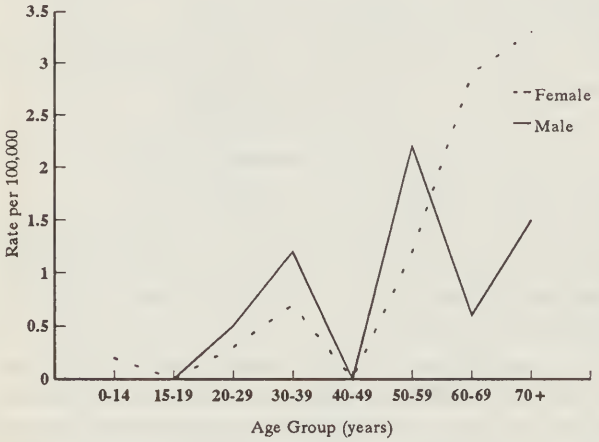


Fig 7. Legionellosis. Incidence rates by age group and sex, Maryland, 1992.

LYME DISEASE (185)

3.8/100,000 (U.S. 3.1/100,000)

In 1992 Lyme disease decreased by 34.6% from 1991 (283 cases). This is the first decline of reported cases since the first Maryland case was diagnosed and reported in Cecil County in 1979; this could be due to a less aggressive follow-up of Lyme antibody laboratory test results to identify additional cases. The trend of Lyme disease in the past 6 years in illustrated in Figure 8. In 1992, every county, except Allegany, Frederick, and Garrett, reported cases. The number of cases by jurisdiction are shown in Table 1 (see July, 1993 issue), and in Table 2, which also indicates the incidence rates per 100,000 population from 1990 to 1992.

Eighty-one percent of all cases had onset of illness in April through September; the peak incidence was in June (49 cases) and July (46 cases).

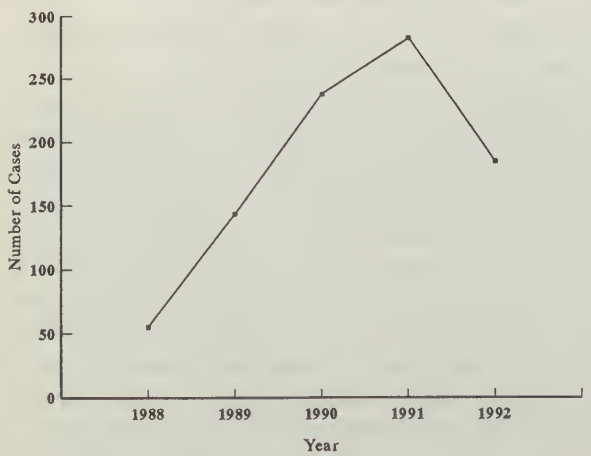


Fig 8. Lyme disease. Cases reported, Maryland, 1988-1992.

The male to female ratio was 1.5:1.0. Among the cases with known race (182), 164 (90.1%) were white, 13 (7.1%) black, and 5 (2.8%) other race. Ages ranged from 1 to 81 years (mean 34, median 32 years).

Of the 185 cases, 133 (71.9%) had erythema migrans, 54 (29.2%) had arthritis, 16 (8.6%) had Bell's palsy, 12 (6.5) had erythema migrans and arthritis, 6 (3.2%) had radiculoneuropathy, 4 (2.2%) had cardiologic symptoms, and 3 (1.6) had encephalitis. Thirty-two (17.3%) patients required hospitalization.

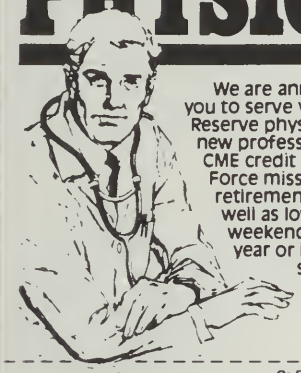
A definite tick bite prior to onset of illness was reported by 66 (35.7%) cases; 88 (47.6%) had no known tick exposure, and for 38 (20.5%) there was no exposure information available.

Table 2. Lyme Disease in Maryland 1990-1992

COUNTY	1990		1991		1992	
	N	Rate	N	Rate	N	Rate
Allegany	1	1.3	1	1.3	0	0.0
Anne Arundel	27	6.3	22	5.1	8	1.8
Baltimore City	12	1.6	10	1.4	10	1.4
Baltimore Co.	39	5.6	49	7.0	35	5.0
Calvert	7	3.6	4	7.5	6	10.9
Caroline	3	11.1	22	80.2	16	57.8
Carroll	5	4.1	4	3.1	2	1.5
Cecil	15	21.0	30	37.6	11	13.6
Charles	23	22.7	10	9.7	11	10.3
Dorchester	1	3.3	5	16.3	4	13.0
Frederick	3	2.0	2	1.3	0	0.0
Garrett	0	0.0	0	0.0	0	0.0
Harford	27	14.8	18	9.8	13	7.0
Howard	10	5.3	7	3.7	3	1.6
Kent	9	50.4	12	69.9	14	81.3
Montgomery	13	1.7	11	1.5	6	0.8
Pr. George's	10	1.4	8	1.1	8	1.1
Queen Anne's	10	29.5	27	79.6	17	48.7
Saint Mary's	5	6.6	14	18.7	6	7.9
Somerset	0	0.0	2	8.7	4	17.4
Talbot	1	3.3	4	13.7	5	16.9
Washington	3	2.5	0	0.0	0	0.0
Wicomico	6	8.1	6	7.9	2	2.6
Worcester	8	8.1	15	38.5	4	10.1
TOTAL	238	5.0	283	5.9	185	3.8

To be concluded in September, 1993.

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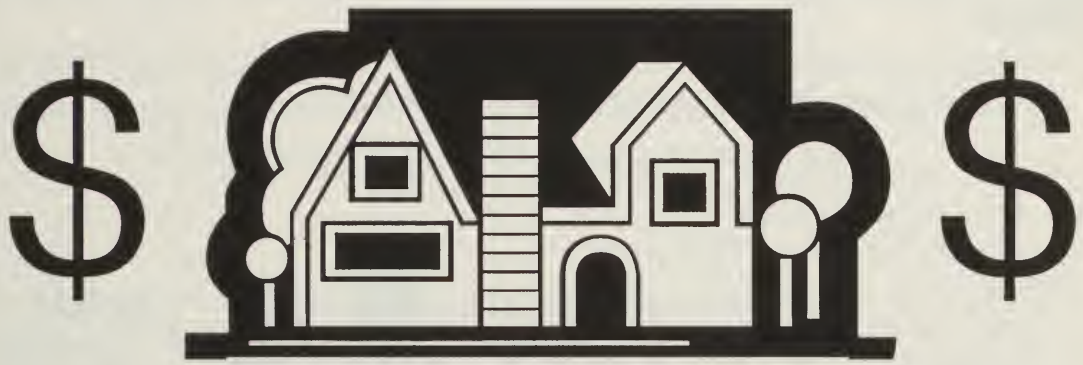
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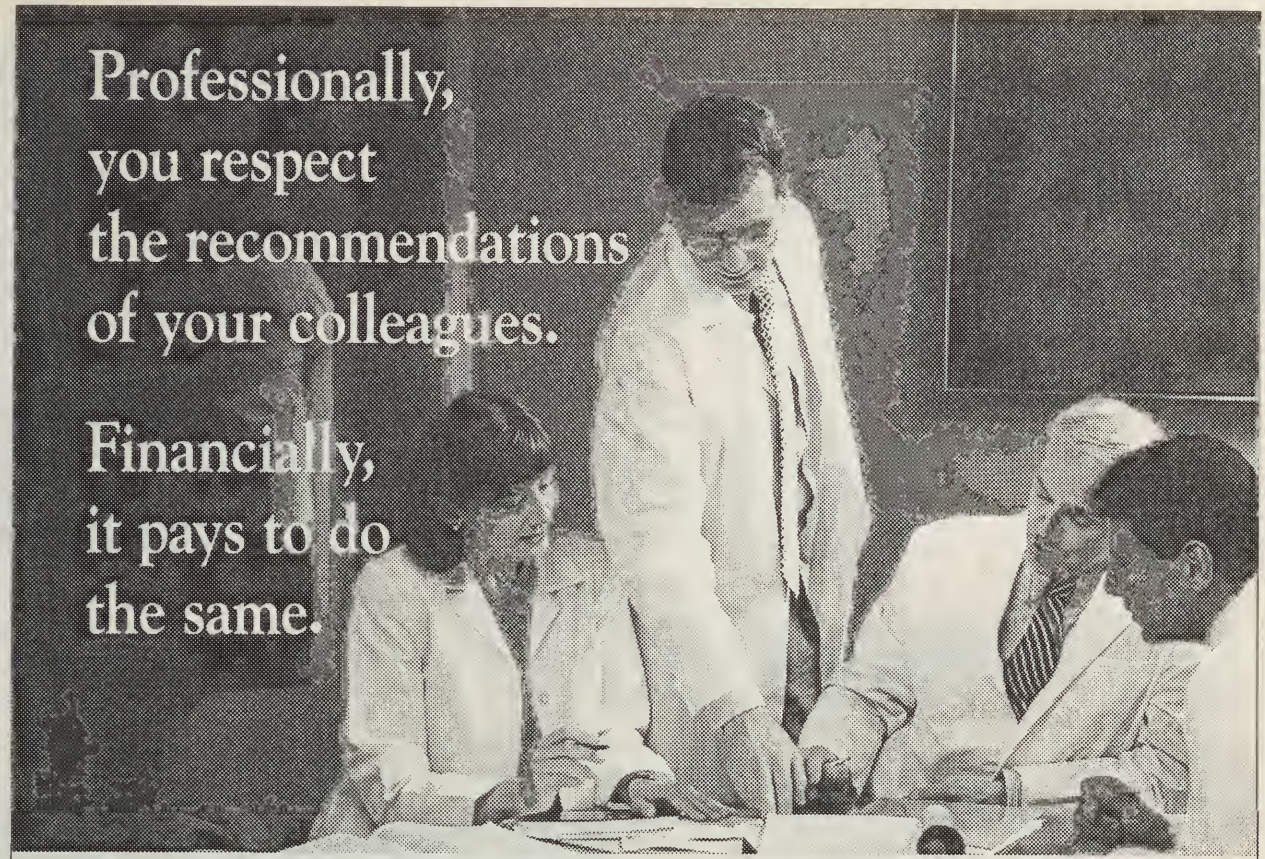
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Chief Executive Officer's Newsletter

September 1993

Come Hear About Health Care Reform in Maryland

The following three regional meetings, sponsored by Maryland's Health Care Access and Cost Commission (HCACC), have been scheduled to provide information on how Maryland's reform plan will affect business and health practitioners:

Date: September 27, 1993
Time: 2:00 pm - 5:00 pm
Place: Howard Johnson, Hagerstown
1718 Underpass Way

Date: October 4, 1993
Time: 2:00 pm - 5:00 pm
Place: Hyatt Regency, Bethesda
1 Bethesda Metro Center

Date: October 25, 1993
Time: 2:00 pm - 5:00 pm
Place: Wicomico Youth & Civic Center, Salisbury
500 Glen Avenue

The meetings will cover the topics of small group market reform, cost containment, practice parameters, and the plan's relationship to federal reform. Panelists will include: The Honorable Casper R. Taylor, Jr., chairperson, House Economic Matters Committee; The Honorable Thomas P. O'Reilly, chairperson, Senate Finance Committee; William C. Richardson, chairperson, Health Care Access and Cost Commission, and Nelson J. Sabatini, secretary, Department of Health and Mental Hygiene. For additional information, please call the HCACC at 410-764-3460.

Uniform Claim Form

The Maryland Department of Licensing and Regulation, Insurance Division, has promulgated regulations to standardize the forms used in billing and reimbursement of health care, reduce the number of forms utilized, and increase efficiency through standardization. Med Chi responded to these regulations prior to their publication and supported the use of the HCFA 1500 form as the standardized form.

According to the new regulations, physicians will be required to use the HCFA 1500 form when filing claims with third party payers for professional services. Under the regulations, a third party payer may not require a physician to use any other descriptor with a code or to furnish additional information with the initial submission of a HCFA 1500 form except (1) when the procedure code used describes a treatment or service that is not otherwise classified; and (2) when the procedure code is followed by modifiers, in which case the physician may use the HCFA 1500 form to explain the modifiers. Also, the HCFA 1500 form may be used to indicate it is an *amended* version of a form previously submitted by inserting the word, "amended" in Box 19, currently titled "Reserved for Local Use." If billing is

based on the amount of time involved, the physician shall indicate the number of units in Box 24G, currently titled "Days or Units," of the HCFA 1500 form if it is not used to specify the number of days of treatment.

The HCFA 1500 form must be used for any claim received by a third party payer *on* or *after* **October 1, 1993.**

If you have any questions or concerns, please contact Rose Matricciani, chief operating officer, at 410-539-0872 or 1-800-492-1056.

Medicare Claims for Durable Medical Equipment to be Handled by Four Regional Carriers

The Medicare Division of Blue Cross and Blue Shield of Maryland recently announced that the Health Care Financing Administration (HCFA) has consolidated its durable medical equipment claims operations for Medicare beneficiaries, dividing the nation into four separate regions. Maryland falls into Region B, whose carrier for durable medical equipment will become AdminaStar Federal Inc. of Indiana.

All duties associated with the processing of claims for durable medical equipment under Part B of the Medicare Program in Maryland will be performed by AdminaStar Federal beginning October 1, 1993, for beneficiaries in Prince George's and Montgomery counties, and December 1, 1993, for beneficiaries in Maryland's other counties. Only Medicare claims for durable medical equipment and supplies will be affected by this change. All other Medicare claims processing will continue to be administered by Blue Cross and Blue Shield.

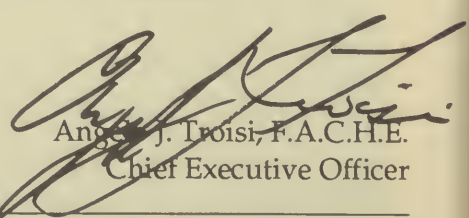
Maryland Medicare beneficiaries can contact AdminStar Federal with any questions at 1-800-270-2313.

Computers in Medicine Survey

In order to better understand and monitor the impact computers are having on medical practice, the Med Chi Computers in Medicine Committee requests that you take a few moments to complete and return the survey that follows this issue of the *Chief Executive Officer's Newsletter.*

Med Chi Sponsors Press Conference to announce Initiation of the Maryland Physicians' Campaign Against Family Violence

On September 8, 1993, Med Chi, in conjunction with the Maryland Alliance Against Family Violence, held a press conference to announce the initiation of the Maryland Physicians' Campaign Against Family Violence. The campaign is designed to educate physicians about the prevalence of family violence, its impact on the health of its victims, and the need for intervention by the medical community. The campaign theme is "*Unlock the silence. The key is trust.*" Three areas will be targeted: domestic violence, also known as spouse or partner abuse, child abuse, and elder abuse. The story was covered by WPOC-FM, Baltimore, and WBAL-AM, Baltimore.



Anc[illegible] J. Troisi, F.A.C.H.E.
Chief Executive Officer

Survey: Computer Use in Medical Offices

Dear Colleague:

Computers are having a tremendous impact on the way we practice medicine. In order to better understand and monitor this impact, the Computers in Medicine Committee has prepared this brief questionnaire.

Please take a few moments from your busy schedule to complete the survey. The committee will keep you apprised of the results through the Maryland Medical Journal. *Your participation is greatly appreciated.*

Sincerely,
Dino E. Flores, M.D., F.A.C.S.
Chairperson, Computers in Medicine Committee

---

1. **Do you use computers in your office?**

   ❑ Yes

   ❑ No Why not? _____

   _____ (Go to #9)

2. **What kind of computer do you use?**

   ❑ IBM-compatible ❑ Macintosh ❑ Other _____

   (please specify)

3. **What other type of hardware do you use?**

   ❑ Notebook/Laptop ❑ MODEM ❑ Other _____

   (please specify)

4. **What kind of operating system do you use?**

   ❑ DOS ❑ Unix ❑ Windows ❑ Don't know

   ❑ Other _____

   (please specify)

5. **What is the structure of your system?**

   ❑ Single user ❑ Multiuser ❑ Network ❑ Don't know

   ❑ Other _____

   (please specify)

6. **How many terminals/work stations do you have?** _____

7. **If applicable, provide the name of the program you use for**

   Billing: _____

   Word processing: _____

   Spreadsheet: _____

   Medical recordkeeping: _____

8. **What is the name of your distributor/supplier?** _____

9. **What is your specialty?** _____

10. How many physicians are in your practice? _____

11. How many offices do you have? _____

12. How many nonphysician employees in your office(s)? _____

13. In what county is your primary office? _____

14. How do you see your medical office improving through the expanded use of computers?

_____

_____

_____

_____

_____

15. What could Med Chi do to help you with your computer usage?

_____

_____

_____

_____

_____

16. Optional

Name: _____

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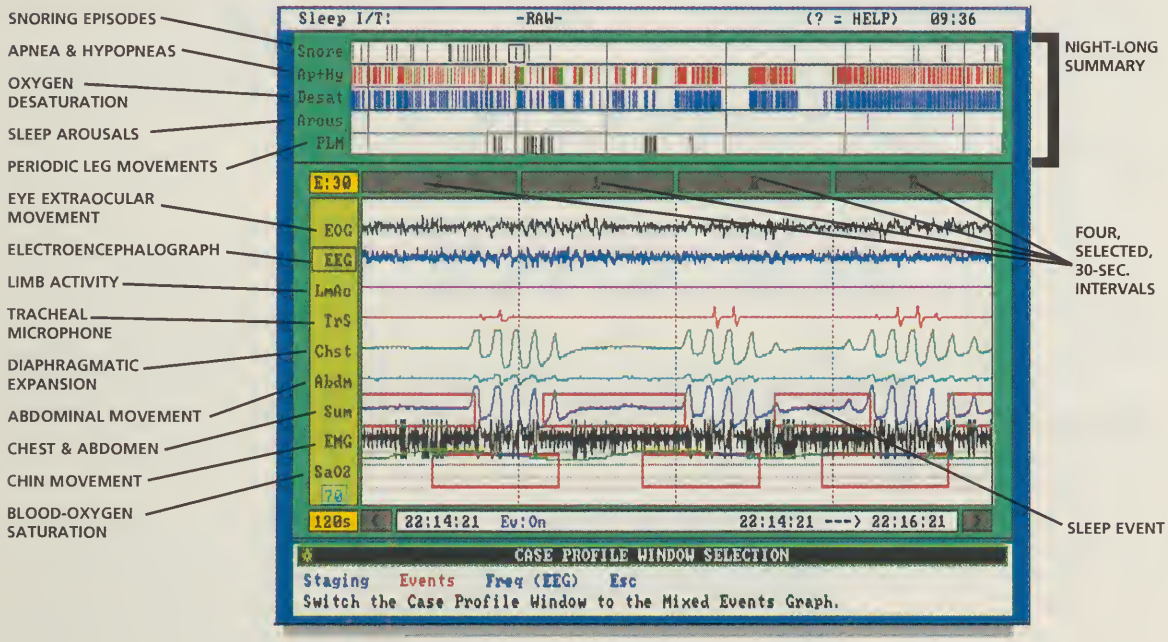
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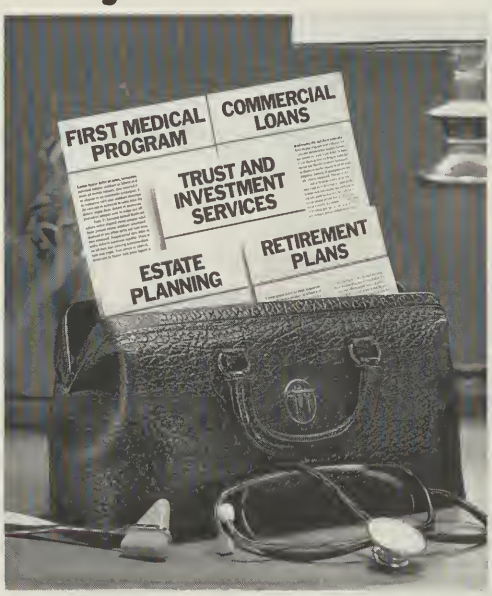
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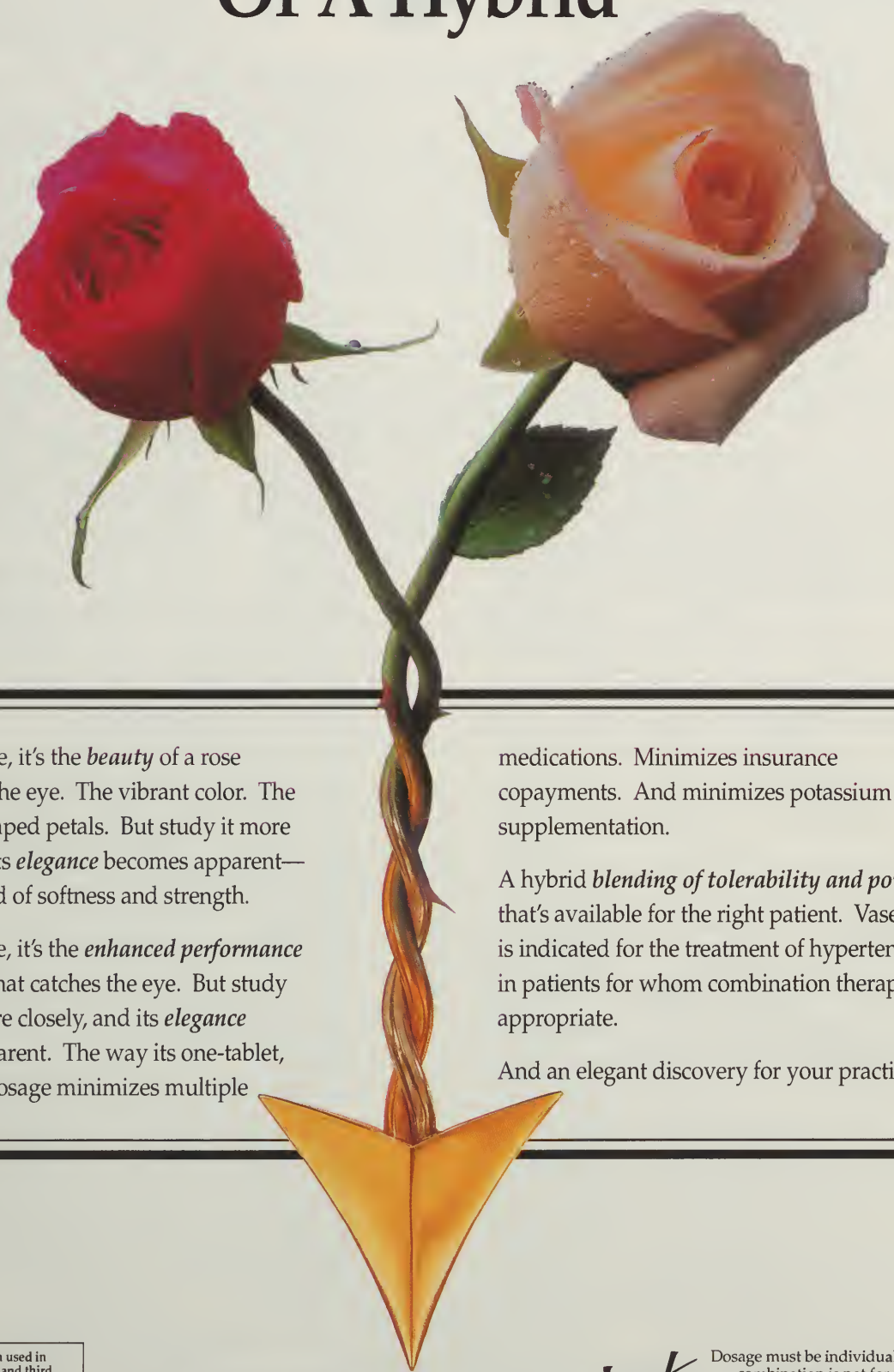
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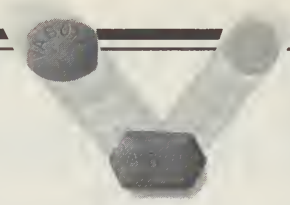
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Dosage must be individualized; the fixed combination is not for initial therapy.

Evaluation of the hypertensive patient should always include assessment of renal function.

For a Brief Summary of Prescribing Information, see adjacent pages.

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(ENALAPRIL MALEATE-HYDROCHLOROTHIAZIDE)



USE IN PREGNANCY: When used in pregnancy during the second and third trimesters, ACE inhibitors can cause injury and even death to the developing fetus. When pregnancy is detected, VASERETIC® (Enalapril Maleate-Hydrochlorothiazide) should be discontinued as soon as possible. See WARNINGS, *Fetal/Neonatal Morbidity and Mortality.*

CONTRAINDICATIONS: VASERETIC is contraindicated in patients who are hypersensitive to any component of this product and in patients with a history of angioedema related to previous treatment with an angiotensin converting enzyme inhibitor. Because of the hydrochlorothiazide component, this product is contraindicated in patients with anuria or hypersensitivity to other sulfonamide-derived drugs.

WARNINGS: *General; Enalapril Maleate; Hypotension:* Excessive hypotension was rarely seen in uncomplicated hypertensive patients but is a possible consequence of enalapril use in severely salt/volume depleted persons such as those treated vigorously with diuretics or patients on dialysis.

Syncope has been reported in 1.3 percent of patients receiving VASERETIC. In patients receiving enalapril alone, the incidence of syncope is 0.5 percent. The overall incidence of syncope may be reduced by proper titration of the individual components. (See PRECAUTIONS, *Drug Interactions*, and ADVERSE REACTIONS.)

In patients with severe congestive heart failure, with or without associated renal insufficiency, excessive hypotension has been observed and may be associated with oliguria and/or progressive azotemia, and rarely with acute renal failure and/or death. Because of the potential fall in blood pressure in these patients, therapy should be started under very close medical supervision. Such patients should be followed closely for the first two weeks of treatment and whenever the dose of enalapril and/or diuretic is increased. Similar considerations may apply to patients with ischemic heart or cerebrovascular disease, in whom an excessive fall in blood pressure could result in a myocardial infarction or cerebrovascular accident.

If hypotension occurs, the patient should be placed in the supine position and, if necessary, receive an intravenous infusion of normal saline. A transient hypotensive response is not a contraindication to further doses, which usually can be given without difficulty once the blood pressure has increased after volume expansion.

Angioedema: Angioedema of the face, extremities, lips, tongue, glottis and/or larynx has been reported in patients treated with angiotensin converting enzyme inhibitors, including enalapril. In such cases VASERETIC should be promptly discontinued and appropriate therapy and monitoring should be provided until complete and sustained resolution of signs and symptoms has occurred. In instances where swelling has been confined to the face and lips the condition has generally resolved without treatment, although antihistamines have been useful in relieving symptoms. Angioedema associated with laryngeal edema may be fatal. **Where there is involvement of the tongue, glottis or larynx, likely to cause airway obstruction, appropriate therapy, e.g., subcutaneous epinephrine solution 1:1000 (0.3 mL to 0.5 mL) and/or measures necessary to ensure a patent airway, should be promptly provided.** (See ADVERSE REACTIONS.)

Patients with a history of angioedema unrelated to ACE inhibitor therapy may be at increased risk of angioedema while receiving an ACE inhibitor (see also CONTRAINDICATIONS).

Neutropenia/Agranulocytosis: Another angiotensin converting enzyme inhibitor, captopril, has been shown to cause agranulocytosis and bone marrow depression, rarely in uncomplicated patients but more frequently in patients with renal impairment especially if they also have a collagen vascular disease. Available data from clinical trials of enalapril are insufficient to show that enalapril does not cause agranulocytosis at similar rates. Marketing experience has revealed several cases of neutropenia or agranulocytosis in which a causal relationship to enalapril cannot be excluded. Periodic monitoring of white blood cell counts in patients with collagen vascular disease and renal disease should be considered.

Hydrochlorothiazide: Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. Cumulative effects of the drug may develop in patients with impaired renal function.

Thiazides should be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

Lithium generally should not be given with thiazides (see PRECAUTIONS, *Drug Interactions, Enalapril Maleate and Hydrochlorothiazide).*

Pregnancy; Enalapril-Hydrochlorothiazide: There was no teratogenicity in rats given up to 90 mg/kg/day of enalapril (150 times the maximum human dose) in combination with 10 mg/kg/day of hydrochlorothiazide (2 ½ times the maximum human dose) or in mice given up to 30 mg/kg/day of enalapril (50 times the maximum human dose) in combination with 10 mg/kg/day of hydrochlorothiazide (2 ½ times the maximum human dose). At these doses, fetotoxicity expressed as a decrease in average fetal weight occurred in both species. No fetotoxicity occurred at lower doses; 30/10 mg/kg/day of enalapril-hydrochlorothiazide in rats and 10/10 mg/kg/day of enalapril-hydrochlorothiazide in mice.

When used in pregnancy during the second and third trimesters, ACE inhibitors can cause injury and even death to the developing fetus. When pregnancy is detected, VASERETIC should be discontinued as soon as possible. (See *Enalapril Maleate, Fetal/Neonatal Morbidity and Mortality,* below.)

Enalapril Maleate; Fetal/Neonatal Morbidity and Mortality: ACE inhibitors can cause fetal and neonatal morbidity and death when administered to pregnant women. Several dozen cases have been reported in the world literature. When pregnancy is detected, ACE inhibitors should be discontinued as soon as possible.

The use of ACE inhibitors during the second and third trimesters of pregnancy has been associated with fetal and neonatal injury, including hypotension, neonatal skull hypoplasia, anuria, reversible or irreversible renal failure, and death. Oligohydramnios has also been reported, presumably resulting from decreased fetal renal function; oligohydramnios in this setting has been associated with fetal limb contractures, craniofacial deformation, and hypoplastic lung development. Prematurity, intrauterine growth retardation, and patent ductus arteriosus have also been reported, although it is not clear whether these occurrences were due to the ACE-inhibitor exposure.

These adverse effects do not appear to have resulted from intrauterine ACE-inhibitor exposure that has been limited to the first trimester. Mothers whose embryos and fetuses are exposed to ACE inhibitors only during the first trimester should be so informed. Nonetheless, when patients become pregnant, physicians should make every effort to discontinue the use of VASERETIC as soon as possible.

Rarely (probably less often than once in every thousand pregnancies), no alternative to ACE inhibitors will be found. In these rare cases, the mothers should be apprised of the potential hazards to their fetuses, and serial ultrasound examinations should be performed to assess the intraamniotic environment.

If oligohydramnios is observed, VASERETIC* should be discontinued unless it is considered lifesaving for the mother. Contraction stress testing (CST), a non-stress test (NST), or biophysical profiling (BPP) may be appropriate, depending upon the week of pregnancy. Patients and physicians should be aware, however, that oligohydramnios may not appear until after the fetus has sustained irreversible injury.

Infants with histories of *in utero* exposure to ACE inhibitors should be closely observed for hypotension, oliguria, and hyperkalemia. If oliguria occurs, attention should be directed toward support of blood pressure and renal perfusion. Exchange transfusion or dialysis may be required as means of reversing hypotension and/or substituting for disordered renal function. Enalapril, which crosses the placenta, has been removed from neonatal circulation by peritoneal dialysis with some clinical benefit, and theoretically may be removed by exchange transfusion, although there is no experience with the latter procedure.

No teratogenic effects of enalapril were seen in studies of pregnant rats, and rabbits. On a mg/kg basis, the doses used were up to 333 times (in rats), and 50 times (in rabbits) the maximum recommended human dose.

Hydrochlorothiazide; Teratogenic Effects: Reproduction studies in the rabbit, the mouse and the rat at doses up to 100 mg/kg/day (50 times the human dose) showed no evidence of external abnormalities of the fetus due to hydrochlorothiazide. Hydrochlorothiazide given in a two-litter study in rats at doses of 4 - 5. 6 mg/kg/day (approximately 1 - 2 times the usual daily human dose) did not impair fertility or produce birth abnormalities in the offspring. Thiazides cross the placental barrier and appear in cord blood.

Nonteratogenic Effects: These may include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

PRECAUTIONS: *General; Enalapril Maleate; Impaired Renal Function:* As a consequence of inhibiting the renin-angiotensin-aldosterone system, changes in renal function may be anticipated in susceptible individuals. In patients with severe congestive heart failure whose renal function may depend on the activity of the renin-angiotensin-aldosterone system, treatment with angiotensin converting enzyme inhibitors, including enalapril, may be associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death.

In clinical studies in hypertensive patients with unilateral or bilateral renal artery stenosis, increases in blood urea nitrogen and serum creatinine were observed in 20 percent of patients. These increases were almost always reversible upon discontinuation of enalapril and/or diuretic therapy. In such patients renal function should be monitored during the first few weeks of therapy.

Some patients with hypertension or heart failure with no apparent preexisting renal vascular disease have developed increases in blood urea and serum creatinine, usually minor and transient, especially when enalapril has been given concomitantly with a diuretic. This is more likely to occur in patients with pre-existing renal impairment. Dosage reduction of enalapril and/or discontinuation of the diuretic may be required.

Evaluation of the hypertensive patient should always include assessment of renal function.

Hemodialysis Patients: Anaphylactoid reactions have been reported in patients dialyzed with high-flux membranes (e.g., AN 69*) and treated concomitantly with an ACE inhibitor. In these patients consideration should be given to using a different type of dialysis membrane or a different class of antihypertensive agent.

Hyperkalemia: Elevated serum potassium (greater than 5.7 mEq/L) was observed in approximately one percent of hypertensive patients in clinical trials treated with enalapril alone. In most cases these were isolated values which resolved despite continued therapy, although hyperkalemia was a cause of discontinuation of therapy in 0.28 percent of hypertensive patients. Hyperkalemia was less frequent (approximately 0.1 percent) in patients treated with enalapril plus hydrochlorothiazide. Risk factors for the development of hyperkalemia include renal insufficiency, diabetes mellitus, and the concomitant use of potassium-sparing diuretics, potassium supplements and/or potassium-containing salt substitutes, which should be used cautiously, if at all, with enalapril. (See *Drug Interactions.)*

Cough: Cough has been reported with the use of ACE inhibitors. Characteristically, the cough is nonproductive, persistent and resolves after discontinuation of therapy. ACE inhibitor-induced cough should be considered as part of the differential diagnosis of cough.

Surgery/Anesthesia: In patients undergoing major surgery or during anesthesia with agents that produce hypotension, enalapril may block angiotensin II formation secondary to compensatory renin release. If hypotension occurs and is considered to be due to this mechanism, it can be corrected by volume expansion.

Hydrochlorothiazide: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals. All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance: hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Warning signs or symptoms of fluid and electrolyte imbalance, irrespective of cause, include dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, confusion, seizures, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present, or after prolonged therapy. Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Hypokalemia may cause cardiac arrhythmia and may also sensitize or exaggerate the response of the heart to the toxic effects of digitalis (e.g., increased ventricular irritability). Because enalapril reduces the production of aldosterone, concomitant therapy with enalapril attenuates the diuretic-induced potassium loss (see *Drug Interactions, Agents Increasing Serum Potassium).*

Although any chloride deficit is generally mild and usually does not require specific treatment except under extraordinary circumstances (as in liver disease or renal disease), chloride replacement may be required in the treatment of metabolic alkalosis.

Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

In diabetic patients dosage adjustments of insulin or oral hypoglycemic agents may be required. Hyperglycemia may occur with thiazide diuretics. Thus latent diabetes mellitus may become manifest during thiazide therapy.

The antihypertensive effects of the drug may be enhanced in the postsympathectomy patient.

If progressive renal impairment becomes evident consider withholding or discontinuing diuretic therapy.

Thiazides have been shown to increase the urinary excretion of magnesium; this may result in hypomagnesemia.

Thiazides may decrease urinary calcium excretion. Thiazides may cause intermittent and slight elevation of serum calcium in the absence of known disorders of calcium metabolism. Marked hypercalcemia may be evidence of hidden hyperparathyroidism. Thiazides should be discontinued before carrying out tests for parathyroid function.

Increases in cholesterol and triglyceride levels may be associated with thiazide diuretic therapy.

Information for Patients; Angioedema: Angioedema, including laryngeal edema, may occur especially following the first dose of enalapril. Patients should be so advised and told to report immediately any signs or symptoms suggesting angioedema (swelling of face, extremities, eyes, lips, tongue, difficulty in swallowing or breathing) and to take no more drug until they have consulted with the prescribing physician.

Hypotension: Patients should be cautioned to report lightheadedness especially during the first few days of therapy. If actual syncope occurs, the patients should be told to discontinue the drug until they have consulted with the prescribing physician.

All patients should be cautioned that excessive perspiration and dehydration may lead to an excessive fall in blood pressure because of reduction in fluid volume. Other causes of volume depletion such as vomiting or diarrhea may also lead to a fall in blood pressure; patients should be advised to consult with the physician.

Hyperkalemia: Patients should be told not to use salt substitutes containing potassium without consulting their physician.

Neutropenia: Patients should be told to report promptly any indication of infection (e.g., sore throat, fever) which may be a sign of neutropenia.

Pregnancy: Female patients of childbearing age should be told about the consequences of second- and third-trimester exposure to ACE inhibitors, and they should also be told that these consequences do not appear to have resulted from intrauterine ACE-inhibitor exposure that has been limited to the first trimester. These patients should be asked to report pregnancies to their physicians as soon as possible.

NOTE: As with many other drugs, certain advice to patients being treated with VASERETIC is warranted. This information is intended to aid in the safe and effective use of this medication. It is not a disclosure of all possible adverse or intended effects.

Drug Interactions; Enalapril Maleate; Hypotension—Patients on Diuretic Therapy: Patients on diuretics and especially those in whom diuretic therapy was recently instituted, may occasionally experience an excessive reduction of blood pressure after initiation of therapy with enalapril. The possibility of hypotensive effects with enalapril can be minimized by either discontinuing the diuretic or increasing the salt intake prior to initiation of treatment with enalapril. If it is necessary to continue the diuretic, provide medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS.)

Agents Causing Renin Release: The antihypertensive effect of enalapril is augmented by antihypertensive agents that cause renin release (e.g., diuretics).

Other Cardiovascular Agents: Enalapril has been used concomitantly with beta adrenergic-blocking agents, methyldopa, nitrates, calcium-blocking agents, hydralazine and prazosin without evidence of clinically significant adverse interactions.

Agents Increasing Serum Potassium: Enalapril attenuates diuretic-induced potassium loss. Potassium-sparing diuretics (e.g., spironolactone, triamterene, or amiloride), potassium supplements, or potassium-containing salt substitutes may lead to significant increases in serum potassium. Therefore, if concomitant use of these agents is indicated because of demonstrated hypokalemia they should be used with caution and with frequent monitoring of serum potassium.

Lithium: Lithium toxicity has been reported in patients receiving lithium concomitantly with drugs which cause elimination of sodium, including ACE inhibitors. A few cases of lithium toxicity have been reported in patients receiving concomitant enalapril and lithium and were reversible upon discontinuation of both drugs. It is recommended that serum lithium levels be monitored frequently if enalapril is administered concomitantly with lithium.

Hydrochlorothiazide; When administered concurrently the following drugs may interact with thiazide diuretics:

Alcohol, barbiturates, or narcotics—potentiation of orthostatic hypotension may occur.

Antidiabetic drugs (oral agents and insulin)—dosage adjustment of the antidiabetic drug may be required.

Other antihypertensive drugs—additive effect or potentiation.

Cholestyramine and colestipol resins—Cholestyramine and colestipol resins bind the hydrochlorothiazide and reduce its absorption from the gastrointestinal tract by up to 85 and 43 percent, respectively. Thiazides may be administered two to four hours before the resin when the two drugs are used concomitantly.

Corticosteroids, ACTH—intensified electrolyte depletion, particularly hypokalemia.

Pressor amines (e.g., norepinephrine)—possible decreased response to pressor amines but not sufficient to preclude their use.

Skeletal muscle relaxants, nondepolarizing (e.g., tubocurarine)—possible increased responsiveness to the muscle relaxant.

Lithium—should not generally be given with diuretics. Diuretic agents reduce the renal clearance of lithium and add a high risk of lithium toxicity. Refer to the package insert for lithium preparations before use of such preparations with VASERETIC.

Non-steroidal Anti-inflammatory Drugs—In some patients, the administration of a non-steroidal anti-inflammatory agent can reduce the diuretic, natriuretic, and antihypertensive effects of loop, potassium-sparing and thiazide diuretics. Therefore, when VASERETIC and non-steroidal anti-inflammatory agents are used concomitantly, the patient should be observed closely to determine if the desired effect of the diuretic is obtained.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Enalapril in combination with hydrochlorothiazide was not mutagenic in the Ames microbial mutagen test with or without metabolic activation. Enalapril-hydrochlorothiazide did not produce DNA single strand breaks in an *in vitro* alkaline elution assay in rat hepatocytes or chromosomal aberrations in an *in vivo* mouse

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YOCON®
YOHIMBINE HCl

Description: Yohimbine is a 3a-15a-20B-17a-hydroxy Yohimbine-16a-carboxylic acid methyl ester. The alkaloid is found in Rubaceae and related trees. Also in Rauwolfia Serpentina (L) Benth. Yohimbine is an indolalkylamine alkaloid with chemical similarity to reserpine. It is a crystalline powder, odorless. Each compressed tablet contains (1/12 gr.) 5.4 mg of Yohimbine Hydrochloride.

Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalmic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon® is indicated as a sympathicolytic and mydriatic. It may have activity as an aphrodisiac.

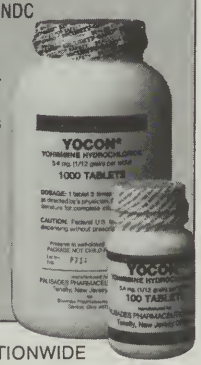
Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.[1,2] Also dizziness, headache, skin flushing reported when used orally.[1,3]

Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.[1,3,4] 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to ½ tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.[3]

How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.



References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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bone marrow assay.

Enalapril Maleate: There was no evidence of a tumorigenic effect when enalapril was administered for 106 weeks to rats at doses up to 90 mg/kg/day (150 times* the maximum daily human dose). Enalapril has also been administered for 94 weeks to male and female mice at doses up to 90 and 180 mg/kg/day, respectively, (150 and 300 times* the maximum daily dose for humans) and showed no evidence of carcinogenicity.

Neither enalapril maleate nor the active diacid was mutagenic in the Ames microbial mutagen test with or without metabolic activation. Enalapril was also negative in the following genotoxicity studies: rec-assay, reverse mutation assay with *E. coli*; sister chromatid exchange with cultured mammalian cells, and the micronucleus test with mice, as well as in an *in vivo* cytogenic study using mouse bone marrow.

There were no adverse effects on reproductive performance in male and female rats treated with 10 to 90 mg/kg/day of enalapril.

Hydrochlorothiazide: Two-year feeding studies in mice and rats conducted under the auspices of the National Toxicology Program (NTP) uncovered no evidence of a carcinogenic potential of hydrochlorothiazide in female mice (at doses of up to approximately 600 mg/kg/day) or in male and female rats (at doses of up to approximately 100 mg/kg/day). The NTP, however, found equivocal evidence for hepatocarcinogenicity in male mice.

Hydrochlorothiazide was not genotoxic *in vitro* in the Ames mutagenicity assay of *Salmonella typhimurium* strains TA 98, TA 100, TA 1535, TA 1537, and TA 1538 and in the Chinese Hamster Ovary (CHO) test for chromosomal aberrations, or *in vivo* in assays using mouse germinal cell chromosomes, Chinese hamster bone marrow chromosomes, and the *Drosophila* sex-linked recessive lethal trait gene. Positive test results were obtained only in the *in vitro* CHO Sister Chromatid Exchange (clastogenicity) and in the Mouse Lymphoma Cell (mutagenicity) assays, using concentrations of hydrochlorothiazide from 43 to 1300 µg/mL, and in the *Aspergillus nidulans* non-disjunction assay at an unspecified concentration.

Hydrochlorothiazide had no adverse effects on the fertility of mice and rats of either sex in studies wherein these species were exposed, via their diet, to doses of up to 100 and 4 mg/kg, respectively, prior to conception and throughout gestation.

Pregnancy: Pregnancy Categories C (first trimester) *and D* (second and third trimesters). See WARNINGS, *Pregnancy, Enalapril Maleate, Fetal/Neonatal Morbidity and Mortality.*

Nursing Mothers: Enalapril and enalaprilat are detected in human milk in trace amounts. Thiazides do appear in human milk. Because of the potential for serious reactions in nursing infants from either drug, a decision should be made whether to discontinue nursing or to discontinue VASERETIC, taking into account the importance of the drug to the mother.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS: VASERETIC has been evaluated for safety in more than 1500 patients, including over 300 patients treated for one year or more. In clinical trials with VASERETIC no adverse experiences peculiar to this combination drug have been observed. Adverse experiences that have occurred, have been limited to those that have been previously reported with enalapril or hydrochlorothiazide.

The most frequent clinical adverse experiences in controlled trials were: dizziness (8.6 percent), headache (5.5 percent), fatigue (3.9 percent) and cough (3.5 percent). Adverse experiences occurring in greater than two percent of patients treated with VASERETIC in controlled clinical trials were: muscle cramps (2.7 percent), nausea (2.5 percent), asthenia (2.4 percent), orthostatic effects (2.3 percent), impotence (2.2 percent), and diarrhea (2.1 percent).

Clinical adverse experiences occurring in 0.5 to 2.0 percent of patients in controlled trials included: *Body As A Whole:* Syncope, chest pain, abdominal pain; *Cardiovascular:* Orthostatic hypotension, palpitation, tachycardia; *Digestive:* Vomiting, dyspepsia, constipation, flatulence, dry mouth; *Nervous/Psychiatric:* Insomnia, nervousness, paresthesia, somnolence, vertigo; *Skin:* Pruritus, rash; *Other:* Dyspnea, gout, back pain, arthralgia, diaphoresis, decreased libido, tinnitus, urinary tract infection.

Angioedema: Angioedema has been reported in patients receiving VASERETIC (0.6 percent). Angioedema associated with laryngeal edema may be fatal. If angioedema of the face, extremities, lips, tongue, glottis and/or larynx occurs, treatment with VASERETIC should be discontinued and appropriate therapy instituted immediately. (See WARNINGS.)

Hypotension: In clinical trials, adverse effects relating to hypotension occurred as follows: hypotension (0.9 percent), orthostatic hypotension (1.5 percent), other orthostatic effects (2.3 percent). In addition syncope occurred in 1.3 percent of patients. (See WARNINGS.)

Cough: See PRECAUTIONS, *Cough.*

Clinical Laboratory Test Findings; Serum Electrolytes: See PRECAUTIONS.

Creatinine, Blood Urea Nitrogen: In controlled clinical trials minor increases in blood urea nitrogen and serum creatinine, reversible upon discontinuation of therapy, were observed in about 0.6 percent of patients with essential hypertension treated with VASERETIC. More marked increases have been reported in other enalapril experience. Increases are more likely to occur in patients with renal artery stenosis. (See PRECAUTIONS.)

Serum Uric Acid, Glucose, Magnesium, and Calcium: See PRECAUTIONS.

Hemoglobin and Hematocrit: Small decreases in hemoglobin and hematocrit (mean decreases of approximately 0.3 g percent and 1.0 vol percent, respectively) occur frequently in hypertensive patients treated with VASERETIC but are rarely of clinical importance unless another cause of anemia coexists. In clinical trials, less than 0.1 percent of patients discontinued therapy due to anemia.

Liver Function Tests: Rarely, elevations of liver enzymes and/or serum bilirubin have occurred.

Other adverse reactions that have been reported with the individual components are listed below and, within each category, are in order of decreasing severity.

Enalapril Maleate— Enalapril has been evaluated for safety in more than 10,000 patients. In clinical trials adverse reactions which occurred with enalapril were also seen with VASERETIC. However, since enalapril has been marketed, the following adverse reactions have been reported: *Body As A Whole:* Anaphylactoid reactions (see PRECAUTIONS, *Hemodialysis Patients*); *Cardiovascular:* Cardiac arrest; myocardial infarction or cerebrovascular accident, possibly secondary to excessive hypotension in high risk patients (see WARNINGS, *Hypotension*); pulmonary embolism and infarction; pulmonary edema; rhythm disturbances including atrial tachycardia and bradycardia; atrial fibrillation; hypotension; angina pectoris; *Digestive:* Ileus, pancreatitis, hepatic failure, hepatitis (hepatocellular [proven on rechallenge] or cholestatic jaundice), melena, anorexia, glossitis, stomatitis, dry mouth; *Hematologic:* Rare cases of neutropenia, thrombocytopenia and bone marrow depression, a few cases of hemolysis in patients with G-6-PD deficiency have been reported in which a causal relationship to enalapril cannot be excluded; *Nervous System/Psychiatric:* Depression, confusion, ataxia, peripheral neuropathy (e.g., paresthesia, dysesthesia); *Urogenital:* Renal failure, oliguria, renal dysfunction (see PRECAUTIONS), flank pain, gynecomastia; *Respiratory:* Pulmonary infiltrates, bronchospasm, pneumonia, bronchitis, rhinorrhea, sore throat and hoarseness, asthma, upper respiratory infection; *Skin:* Exfoliative dermatitis, toxic epidermal necrolysis, Stevens-Johnson syndrome, herpes zoster, erythema multiforme, urticaria, alopecia, flushing, photosensitivity; *Special Senses:* Blurred vision, taste alteration, anosmia, conjunctivitis, dry eyes, tearing.

Miscellaneous: A symptom complex has been reported which may include a positive ANA, an elevated erythrocyte sedimentation rate, arthralgia/arthritis, myalgia, fever, serositis, vasculitis, leukocytosis, eosinophilia, photosensitivity, rash and other dermatologic manifestations.

Fetal/Neonatal Morbidity and Mortality: See WARNINGS, *Pregnancy, Enalapril Maleate, Fetal/Neonatal Morbidity and Mortality.*

Hydrochlorothiazide—Body as a Whole: Weakness; *Digestive:* Pancreatitis, jaundice (intrahepatic cholestatic jaundice), sialadenitis, cramping, gastric irritation, anorexia; *Hematologic:* Aplastic anemia, agranulocytosis, leukopenia, hemolytic anemia, thrombocytopenia; *Hypersensitivity:* Purpura, photosensitivity, urticaria, necrotizing angiitis (vasculitis and cutaneous vasculitis), fever, respiratory distress including pneumonitis and pulmonary edema, anaphylactic reactions; *Musculoskeletal:* Muscle spasm; *Nervous System/Psychiatric:* Restlessness; *Renal:* Renal failure, renal dysfunction, interstitial nephritis (see WARNINGS); *Skin:* Erythema multiforme including Stevens-Johnson syndrome, exfoliative dermatitis including toxic epidermal necrolysis, alopecia; *Special Senses:* Transient blurred vision, xanthopsia.

* Based on patient weight of 50 kg.

For more detailed information, consult your DuPont Pharma Representative or see Prescribing Information.

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Minutes of the House of Delegates—339th session—April 30, 1993

The 339th session of the House of Delegates was held on Friday, April 30, 1993, in the Chesapeake Room of the University of Maryland University College Conference Center, College Park, Maryland.

◆ *Members present*

Allegany County
Hijab, Wally S.
Miles, Leslie R. Jr.
Miltenberger, Frederick
Reyes, Francisco

Anne Arundel County
Alvarez-Velasco, Sergio
Matteson, David E.
O'Herlihy, Hilary T.
Walman, A. Terry

Baltimore City
Burgan, Paul
Collins, Beverly A.
DeLeon, Augusto R.
Dembo, Donald H.
Dritsas, K. George
Edwards, Willarda V.
Folgueras, Albert
Friedman, Marion
Greif, William L.
Haciski, Rafael C.
Hooper, Joseph H.
Hunt, Thomas E.
Jensen, Allan D.
Kalish, Murray A.
Mintzer, Donald W.
Nahum, Albert
Nakazawa, Hiroshi
O'Mansky, Samuel I.
Roche, Jeffrey C.
Rosenberg, Gary L.
Ross, Jerome
Smoot, Roland T.
Soprey, Nisha P.
Weaver, Karl H.
Whipps, Randolph G.
Yin, Robert L.
Zebley, Joseph W. III
Zimmerman, Jack M.

Baltimore County
Allen, Thomas E.
Ballesteros, Rubin F.
Barranco, Frank T.
Blumberg, Albert L.
Bob, Harold B.
Brecher, Herman
Breschi, Louis C.
Davis, Alan Steven
Edery, Esther
Ghiladi, A. Hamid
Hagaman, Scott D.
Hebb, John H.
Hirata, Richard M.
Jolbitado, Deusdedit
Krager, John M.
Liebman, Mayer C.
Martinez, Jose
Merani, Elsa R.
Nagel, J. David
Orrell, Ronald Jay
Pushkin, Gary W.
Sherrard, Margaret L.
Siegel, Howard L.
Taylor, Kathleen E.
Taylor, Robert M.

Calvert County
Fastow, Joseph

Carroll County
Welliver, Daniel I.

Cecil County
Farkas, Henry J.
Fridberg, Andrew P.

Charles County
Sanchez, Guillermo E.

Dorchester County
Burdette, Lewis M.
Stagg, Paul A.

Frederick County
Baker, J. Fred

Garrett County
Leighton, Herbert H.

Harford County
Bonsack, Rose Mary H.
Hatem, Frederick J.
Oteyza, Ben

Howard County
Bianco, Emidio A.
Boyd, Joyce M.
Schub, Russell
Taylor, Charles E.
Winter, Brian J.

Kent County
Keefe, Arthur T. Jr.

Montgomery County
Avrunin, Benjamin
Bender, Carol L.
Dempsey, Michael A.
Doman, David B.
Gantt, Elizabeth S.
Garvey, Carol W.
Genovese, Joseph J. Jr.
Gershen, Barton J.
Grossberg, David B.
Kaufman, Peter N.
Longway, Ralph E.
Nasou, John P.
Plotsky, Carol A.
Poitras, James K.
Richards, Franklin D.
Rubin, Bruce E.
Schneider, Philip L.
Seigel, Mark S.
Snow, Margaret T.
Snyder, Joseph
Stepita, Donald S.
Vaghi, Vincent J.
White, Stephen W.

Prince George's County
Blair, Willie C.
Chesley, James S.
Goodman, Nelson G.
Jeffrey, John E.
Lee-Llacer, Reynaldo L.
Lee-Llacer, Zorayda M.
Lilly, John R.
Maldonado, Benjamin Jr.

Malouf, George S. Jr.
Malouf, George S. Sr.
Nayeem, Abdul
Robb, David N.
Ruderman, Robert
Wilhelm, Frederick

Queen Anne's County
Smith, John R., Jr.

St. Mary's County
Guyther, J. Roy

Talbot County
Fisher, Michael J.

Washington County
Ellis, Randy S.
McWilliams, Wayne A.
Newby, John G.

Wicomico County
Azar, Alex
Cockey, James A.
Houlihan, Hilda I.
Saggar, Deepak
Smoot-Haselnus, Catherine N.

Worcester County
Arthes, Federico G.

Student Component
Huber, Michael
Wise, Jeffrey J.

Specialty Societies
Gerstenblith, Jay
Kohn, Daniel E.

Board of Physician Quality Assurance
Weiner, Israel H.

Past presidents
DeLawter, DeWitt E.
Dobridge, Michael R.

◆ *Call to order*

The 339th session of the House of Delegates was called to order by the president and chairperson, Jose M. Yosuico, M.D., at 3:20 p.m.

◆ *Invocation*

James Davis, M.D., past president of the American Medical Association(AMA) and parliamentarian, delivered the invocation.

◆ *Pledge of allegiance*

The House of Delegates was led in the pledge of allegiance by the Capitol Brass Quintet, which had played patriotic music as the House of Delegates was assembling. Dr. Yosuico thanked the members of the quintet.

◆ *Visiting dignitaries*

Dr. Yosuico mentioned the visiting dignitaries as follows:

- ✧ Raymond Scalettar, M.D., AMA Board of Trustees chairperson
- ✧ President-elect Thomas J. Maxwell, M.D., Delaware Medical Society
- ✧ Vice-President John H. Hobart, M.D., Pennsylvania Medical Society
- ✧ President George E. Broman, M.D., Virginia Medical Society, and his wife Nancy
- ✧ President Harold Weiss, M.D., DC Medical Society, and his wife Barbara
- ✧ James Davis, M.D., past president of the AMA and former speaker of the AMA House of Delegates.

◆ *Announcements*

The chairperson drew the delegation's attention to the announcements contained in the agenda and reminded members that when they had the privilege of the floor, they were to announce their name and component medical society.

◆ *Approval of minutes*

The minutes of the 338th session of the House of Delegates, which was held during the 1992 semiannual meeting, were approved at the October 15, 1992, meeting of the Executive Committee, as mandated by the bylaws. The minutes were adopted also by the House of Delegates as written.

◆ *Necrology*

Carol W. Garvey, M.D (Montgomery County), secretary, made a motion to dispense with the reading of the list of deceased members since the information had been sent out with the call of the meeting. The motion was seconded and approved. The necrology list was as follows:

Allegany County
Ralph W. Ballin, M.D., February 23, 1993
Ralph A. Reiter, M.D., February 8, 1993
Benedict Skitarelic, M.D., December 11, 1992

Anne Arundel County
Jesse L. Wilins, M.D., January 25, 1993
Eva N. Zartman, M.D., May 8, 1992

Baltimore City
Raymond M. Atkins, M.D., November 13, 1992
Gilbert W. Benjamin, M.D., May 20, 1992
Edward Davens, M.D., September 8, 1992
Nachman Davidson, M.D., December 17, 1992
Jivaka B. DeSilva, M.D., November 14, 1992
Martin W. Donner, M.D., April 13, 1992
Eli K. Fraiji, M.D., December 4, 1992
Robert W. Garis, M.D., November 29, 1992
William E. Gilmore, M.D., October 16, 1992
Charles M. Henderson, M.D., January 28, 1992

Harry C. Hull, M.D., December 15, 1992
John Josselson, M.D., October 8, 1992
C. Edward Leach, M.D., October 17, 1992
John W. Machen, M.D., January 4, 1992
Stephen C. Mackowiak, M.D., February 20, 1993
Albert I. Mendeloff, M.D., March 15, 1993
Moses Paulson, M.D., November 14, 1991
Milos B. Radwick, M.D.
M. Elliott Randolph, M.D., February 16, 1992
Gilbert E. Rudman, M.D., March 7, 1993
James Arthur Weinberg, M.D., August 27, 1992
Huntington Williams, M.D., May 4, 1992

Baltimore County

Jose Ardaiz, M.D., February 6, 1993
Edward W. Hopf, M.D., October 1, 1992
Anthony A. Lewandowski, M.D., February 21, 1993
Donald J. Roop, M.D., December 19, 1992
Salvador Rossello, M.D., September 1, 1992
William E. Seabold, M.D., May 28, 1992

Calvert County

Paul V. Lemkau, M.D., April 26, 1992

Dorchester County

Samuel P. Wise III, M.D., May 21, 1992

Howard County

Nestor F. deVenecia, M.D., October 25, 1992

Montgomery County

William D. Aud, M.D., April 29, 1992
Irving Feinberg, M.D., October 18, 1992
John S. Harrington, M.D., May 23, 1992
Daniel L. Hayes, M.D., November 16, 1992
Herbert J. Jacobs, M.D., October 7, 1992
Ira W. Pearlman, M.D., January 22, 1993
Miguel A. Rodriguez, M.D.
Sarah S. Tenenblatt, M.D., November 17, 1992
Clifford J. Turner, M.D., September 5, 1992
Ali H.Z. Youssef, M.D.

Prince George's County

Alfred J. Suraci, M.D., February 4, 1993
Dayton O. Watkins, M.D., July 3, 1992

Wicomico County

Daniel G. Anderson, M.D.
Frank R. Lewis, M.D., September 28, 1992

Affiliates

Dudley P. Jackson, M.D., September 15, 1992
Henry L. Spiegelman, M.D., November 24, 1992
Aubrey L. Stafford, M.D., November 3, 1992

◆ *Memorial resolutions*

Dr. Garvey noted that the memorial resolutions had been provided to all members (revised agenda). She asked that the House of Delegates pause a few minutes to honor Raymond M. Atkins, M.D., a former Med Chi president, and Joseph Harrison III, Med Chi's former director of finance. Dr. Garvey also requested that the House of Delegates dispense with the reading of the memorial resolutions. The motion was seconded and approved. The memorial resolutions, as distributed to House of Delegates members, were as follows:

Daniel G. Anderson, M.D.
1931-1992

Whereas Daniel G. Anderson, M.D., born in Pittsburgh, Pennsylvania, in 1931, received his medical degree from the University of Maryland School of Medicine, and served as chief resident in pediatrics at the University of Virginia in Charlottesville; and

Whereas he practiced pediatrics in Salisbury for more than 30 years; and

Whereas Dr. Anderson then served, with dedication and skill his many young patients, from birth through childhood, watching them grow and healing their pains; and

Whereas he served as an active member of the Wicomico County Medical Society; and

Whereas he has long been a member of the Medical and Chirurgical Faculty of Maryland; and

Whereas he will be long remembered for his ready laughter and good humor, and particularly for his service to his church and to his God; and

Whereas his untimely death has left a void in the lives of his family, friends, patients, and colleagues; and

Whereas the Wicomico County Medical Society and the Medical and Chirurgical Faculty of Maryland express their sympathy to his family: Now, therefore be it

Resolved, That this resolution be spread upon the minutes of the House of Delegates at its annual meeting, with a copy sent to his wife, Mrs. Margaret Anderson.

Jose Ardaiz, M.D.
1927-1993

Whereas Jose Ardaiz, M.D., an internist, a member of the Baltimore County Medical Association and the Medical and Chirurgical Faculty of Maryland, and beloved husband of Sheila O'Shea Ardaiz, and father of Patrick Jose, who was killed while serving in the United States Navy in Bosnia in March 1993, Michael Jose, a third year medical student at the George Washington Medical School, and Sean Pablo, who served in the US Marines and is awaiting acceptance to medical school, died on February 5, 1993; and

Whereas Jose Ardaiz, M.D., a graduate of the University of Zaragoza in Spain, where he also received a doctorate in pharmacology, rheumatology, and cardiology, and worked in cardiology research at Indiana University; and

Whereas Jose Ardaiz, M.D., had a fellowship at Sinai Hospital and later joined a group practice, taking over the practice at a later time; and

Whereas Jose Ardaiz, M.D., was an old-fashioned, moral, and upright physician who still made house calls, would not charge patients, was always in the pursuit of perfection, and was competent and caring; and

Whereas Jose Ardaiz, M.D., loved his children, wife, practice, and religion and enjoyed music and art: Therefore be it

Resolved, That this House of Delegates of the Medical and Chirurgical Faculty of Maryland adopts this resolution as an expression of sympathy to his family; and be it further

Resolved, That this resolution be spread upon the minutes of the House of Delegates meeting and a copy sent to the Ardaiz family in recognition of the high regard in which he was held by his family, patients, and peers.

Raymond M. Atkins, M.D.
1927-1992

Whereas Raymond M. Atkins, M.D., a general and vascular surgeon, past president of the Baltimore City Medical Society and the Medical and Chirurgical Faculty of Maryland, alternate delegate to the American Medical Association, and beloved husband, father, and grandfather, died on November 11, 1992; and

Whereas Raymond M. Atkins, M.D., served as a member of the Maryland National Guard and the US Army Reserve in which he held the rank of colonel and received the Legion of Merit; and

Whereas Raymond M. Atkins, M.D., was instrumental in having the medical staffs of the former North Charles General Hospital and the Homewood Hospital endow annual scholarships through the Baltimore City Medical Society Foundation, Inc., for Maryland medical school students attending the Johns Hopkins University School of Medicine or the University of Maryland medical school, and

Whereas Raymond M. Atkins, M.D., was an active and supportive member of the Baltimore City Medical Society and the Medical and Chirurgical Faculty for over 30 years, serving on numerous committees and in several offices before becoming president of both organizations; and

Whereas Raymond M. Atkins, M.D., long will be remembered for his many services to his patients, his profession, and his community: Therefore be it

Resolved, That this House of Delegates of the Medical and Chirurgical Faculty of Maryland adopts this resolution as an expression of profound sorrow on the loss of Raymond M. Atkins, M.D.; and be it further

Resolved, That this resolution be spread upon the minutes of the meeting and a copy sent to the Atkins family in recognition of the high esteem in which Raymond M. Atkins, M.D., was held and will be remembered.

Nestor F. deVenecia, M.D.
1926-1992

Whereas Nestor F. deVenecia, M.D., was born February 25, 1926, in Dagupan City, the Philippines, and was educated at the University of Philippines College of Liberal Arts and the College of Medicine, receiving his medical degree in 1950; and

Whereas Dr. deVenecia came to the United States in 1950 having been accepted as the first Filipino in the anesthesia program at Duke University; and

Whereas Dr. deVenecia then entered the Duke University Surgery Training Program in 1952, where again he was the first Filipino to be accepted into the program, and was then accepted as the first Filipino resident in the University of Maryland Hospital in Baltimore; and

Whereas Dr. deVenecia then migrated to St. Louis to serve as acting chief of anesthesia at the Veterans Administration Hospital, and who then returned to Georgetown University to serve as a cardiovascular fellow in preparation for a surgical position awaiting him at his father's hospital in the Phillipines in 1968; and

Whereas Dr. deVenecia returned to this area then to help establish the emergency room practice at Prince George's Hospital Center and eventually moved to Columbia to set up his own practice in 1978; and

Whereas he applied for and became a member of the Howard County Medical Society and the Medical and Chirurgical Faculty of Maryland, became an active staff member at Howard County General Hospital, and maintained active memberships in the American College of Family Physicians, the American Geriatric Society, the American College of Surgeons, and the American College of Chest Physicians; and

Whereas Dr. deVenecia was most importantly regarded as "a gentleman for all seasons," respected and loved by his patients, never said a disparaging word to another man and held his family in highest regard with love and price: Therefore be it

Resolved, That this House of Delegates of the Medical and Chirurgical Faculty on April 30, 1993, adopts this resolution with a spirit of profound sorrow on the death of Dr. deVenecia; and be it further

Resolved, That this very resolution be contained within the minutes of this meeting and honorably sent to his wife Eleanor, his sons, Nestor Lawrence and Ronald Kent, and his daughter Brenda Aileen, and have copies available for his surviving siblings, Drs. Josefina Fernandez Rosita deVenecia and Virginia Laza, in recognition of the high esteem in which Dr. deVenecia will be remembered.

Joseph J. Harrison III
1929-1993

Whereas Joseph J. Harrison III, devoted husband of Marie Harrison, died suddenly on January 16, 1993, at the age of 63; and

Whereas Joe and Marie were blessed with five wonderful children: Teresa, Joseph IV, Joan, Thomas, and Mary, and six grandchildren; and

Whereas Joe began working at the Medical and Chirurgical Faculty of Maryland in August of 1963; and

Whereas Joe served as associate executive director of Med Chi, director of the Med Chi Insurance Fund, secretary and treasurer of the Med Chi Agency, and treasurer of the Maryland Medical Political Action Committee; and

Whereas Joe was instrumental in the creation of the Med Chi Agency; and

Whereas Joe was committed to protecting Med Chi funds; and

Whereas Joe was a friend of many—member physicians and fellow workers—and will be missed: Therefore be it

Resolved, That this resolution be included in the minutes of this meeting and a copy sent to Joe Harrison III's wife and family in recognition of the high regard in which Joe was held by the physicians of Maryland, his fellow workers, and friends.

◆ *Award presentations*

a. 50-Year certificates. The chairperson read the list of 50-year members as follows:

Baltimore City

Eugene S. Bereston, M.D.
Charles N. Davidson, M.D.
John H. Hirschfeld, M.D.
L. Harrell Pierce, M.D.
Leland B. Stevens, M.D.
Alice B. Tobler, M.D.

Baltimore County

John C. Baier, M.D.
W. Drummond Eaton, M.D.

Affiliates

Alfred B. Dixon, M.D.

John H. Hirschfield, M.D., and L. Harrell Pierce, M.D., from Baltimore City, were present and accepted their 50-year certificates.

b. AMA-ERF awards. The chairperson noted that contributions to the AMA-ERF (American Medical Association Education and Research Foundation) fund in 1992 totaled more than $35,000, of which more than $22,000 was contributed by Med Chi members. AMA-ERF checks were presented to the three medical schools by Elizabeth Linhardt, chairperson of the Maryland AMA-ERF fund; Myrna Goodman, president of the Med Chi Auxiliary; and Mildred Taylor, president-elect of the Southern Medical Association Auxiliary.

Roland Smoot, M.D., accepted the AMA-ERF checks on behalf of the Johns Hopkins medical school. The school was given a check for more than $7,300 in unrestricted funds and a check for $5,600 in restricted funds for the medical student assistance program. Dr. Smoot noted that he accepted the funds on behalf of Dean Johns with gratitude; noting that the medical students were of primary interest to the medical school.

Patricia Digiannantonio, deputy general counsel of the Henry Jackson Foundation of the Uniformed Services University of the Health Sciences, accepted the two checks presented to that school. Ms. Digiannantonio thanked the auxiliary for the support.

Gregory Handlin, associate dean of the University of Maryland School of Medicine, accepted the checks on behalf of the school. The school was presented with a check for $15,000 in unrestricted funds and a check for $7,300 in restricted funds. Mr. Handlin noted that with the recent budget cuts, the money would be very helpful to medical students at the University of Maryland School of Medicine.

c. Wyeth-Ayerst Laboratories Physician Award for Community Service. John O. Meyerhoff, M.D. (Baltimore City), was presented with the Wyeth-Ayerst Laboratories Physician Award for Community Service by the chairperson and Mohammed Saleem, a representative from the A.H. Robins Sales Division for Wyeth-Ayerst Laboratories. The secretary noted that Dr. Meyerhoff, who has worked closely with Parents Anonymous of Maryland, had thought that services should be directed to the children themselves, many of whom were victims of abuse and neglect. Because of his efforts, many young troubled adolescents are now receiving the services they need at 20 Baltimore City and Baltimore County schools.

d. Award for excellence in medicine. The chairperson presented the award for excellence in medicine to Jeffrey Jonathan Wise from the University of Maryland. The secretary noted that Mr. Wise had revitalized the chapter of the AMA Medical Student Section at the University of Maryland, recruiting over 200 members. He had attended national and regional AMA meetings and had organized blood pressure screenings and organ donation drives. Upon receiving his award, Mr. Wise said he hoped that in his absence the AMA Medical Student Section at the University of Maryland would continue to grow.

e. Certificates of recognition to committee chairpersons. The chairperson presented certificates of recognition to the following four physicians for their outstanding service and dedication as chairpersons of Med Chi committees:

- ✧ *Harrold T. Elberfeld, M.D.,* Maternal Welfare Subcommittee
- ✧ *Paul A. Stagg, M.D.,* Ad Hoc Proactive Committee on Self-Referral
- ✧ *John G. Bartlett, M.D.,* Ad Hoc Review Committee on Physicians with Bloodborne Pathogens
- ✧ *Ronald Fishbein, M.D.,* Library and History Committee and Ad Hoc Bicentennial Committee

The chairperson thanked each of the recipients for their ongoing dedication to Med Chi endeavors. Dr. Elberfeld (Baltimore County) noted that thanks should go to the hardworking members of his committee and to the committee's staffperson, Rose M. Matricciani, R.N., J.D., chief operating officer.

f. Photo contest. The first place winner of the Med Chi 12th annual photo contest was Dr. Jerrold M. Post, and the second place winner was Mrs. Morrell L. Williams. Mrs. Williams was present and was recognized by the House of Delegates.

◆ Board of Physician Quality Assurance

Israel H. Weiner, M.D., chairperson, Board of Physician Quality Assurance (BPQA), presented the BPQA report. Dr. Weiner noted that 1992 was the fourth full year of BPQA, and that significant progress had been made during this year. Highlights of the information presented are as follows:

- ✧ In 1990, BPQA had 61 major actions; it was ranked 48th out of 50 states;
- ✧ In 1991, BPQA had 73 major actions; it was ranked 42nd out of 50 states, which also earned BPQA a first-page announcement in *USA Today* and the *Washington Post* as one of the 10 worst medical boards in the country;
- ✧ In 1992, BPQA had 113 major actions; it was ranked 17th out of 50 states.

Dr. Weiner stated that he thought BPQA's successes have been related directly to the fact that BPQA became independently budgeted in 1991. Although the licensing fee had been raised from $50 to $450, BPQA receives only about $250 of that amount. Part of the monies go to the state's general fund, $50 goes to Med Chi for physician rehabilitation and peer review programs, and part covers the cost of BPQA overhead.

Because it is very selective in what is processed, BPQA only lost two cases last year. Dr. Weiner noted that BPQA was updating its computer system. He noted, however, that the process has been moving very slowly; it took over a year just to obtain a consultant report.

Dr. Weiner noted that although, in the past, BPQA received complaints about its slowness in processing cases, over 89% of 2,000 complaints were resolved within 12 weeks last year. The remaining 11% were complicated cases that went to peer review or were referred for other types of investigations. Dr. Weiner further stated that BPQA opened 837 cases for investigation and 179 formal cases were opened. He remarked that BPQA has been chastised in the past for the number of cases over a year old. In 1989, there were 1,312 open cases; 513 were over a year old. Last year, there were 285 open cases, and only 67 were over a year old. Cases are being resolved much more quickly.

BPQA, as of April 1993, started publishing a newsletter that it hopes to continue publishing on a quarterly basis, eventually increasing publication to a bimonthly basis.

Dr. Weiner explained that BPQA has also been trying to improve the physician license renewal system. The application is now much simpler and shorter, requiring only one signature versus the three needed previously. BPQA is planning to initiate a rolling renewal whereby physicians will renew their license on their birthday, which should allow BPQA to handle problems more quickly.

Dr. Weiner noted that Maryland's peer review process is used nationally as a model. He asserted that through Med Chi, BPQA obtains a wide variety of expert reviewers who can cover all specialties and subspecialties in a short period of time; these reviewers can be objective, fair, and disinterested in their evaluation of another physician. In comparing the state's peer review process with that of the PRO (professional review organization), Dr. Weiner noted that Maryland's process is fairer to physicians and more accurate.

Dr. Weiner concluded by stating that BPQA's accomplishments were a direct result of the outstanding job Med Chi has done in the past two years in the peer review process. He noted that Ronald Cohen, M.D., chairperson of the Peer Review Management Committee, has been a "class act" in managing peer review and improving it. Dr. Weiner thought that Dr. Cohen and Steve Johnson, J.D., director of peer review at Med Chi, were two of the most sophisticated peer review theorists in the country. The chairperson thanked Dr. Weiner for his report.

◆ Council's report

a. Chairperson's report. Joseph S. Fastow, M.D., chairperson of Council, noted that the preceding year had been a difficult and controversial year for Council, for Med Chi, and for medicine. He noted that Council made three strategic decisions during the year.

The legal/lobbying representation for Med Chi was one of the first decisions. Dr. Fastow went on to say that the Executive Committee had concluded that Med Chi should be represented by an independent in-house counsel separate from the lobbying firm. As a result, Angus Everton, J.D., was hired.

Subsequent to Mr. Everton's hiring, the issue of lobbying had been discussed. It was determined that there was no justification for the enormous number of dollars being spent for lobbying, and other lobbying arrangements were explored. Dr.

Fastow stated that at that point, the Med Chi lobbyist resigned. Faced with a legislative session only six weeks away and without any legislative files from the previous lobbying firm, it was necessary to hire a lobbyist quickly. Marvin Mandel, J.D., was hired as the Med Chi lobbyist on short notice because of his resources, contacts, and absence of interest in representing others in the health care system. Dr. Fastow asserted that Mr. Mandel had been indispensable to Med Chi. His ability to open doors, to get points across, and to influence legislators was unparalleled. Dr. Fastow noted that Mr. Mandel was the person in the background intervening for Med Chi.

Dr. Fastow explained that some legislation Med Chi faced—RAPs (radiologist, anesthesiologists, and pathologists) legislation, legislation to put all physicians under the Health Systems Cost Review Commission (HSCRC), a physician rehabilitation bill, and the radiology technologist bill—was defeated. Dr. Fastow said that Med Chi had been warned that its ex-lobbyist was "out to get Med Chi" in Annapolis. Dr. Fastow thought that this confirmed that Med Chi had made the right decision in seeking an independent lobbyist and having an Annapolis office open year-round to interact with legislators.

Dr. Fastow also mentioned HB 1359, which he noted left Med Chi faced with decisions that had to be made rapidly. When the final legislation was reviewed, Med Chi had only one day to make a decision. After consultation with the lobbyist, the Executive Committee thought that if Med Chi opposed the bill, Med Chi would have been doing itself a disservice by facing a hostile legislature next year. Dr. Fastow noted the importance of health care decisions being made in Annapolis, not in Washington, DC, for Maryland physicians.

He concluded his legislative comments by recognizing what was mentioned earlier by Delegates Alexander and Taylor at the afternoon meeting on health legislation, that HB 1359 is a beginning. Dr. Fastow went on to say that just as "just say no" did not work for drugs, "just say no" is not going to work on health system reform either. Subsequent legislation will have a great deal to do with modifying HB 1359. Dr. Fastow said that Med Chi was ready in Annapolis to work on health care legislation. The challenges next year will be different than this past year because there will be more challenging issues. Med Chi will need to use its expertise to make its case.

Dr. Fastow thought that political manipulation of the Maryland General Assembly was replaced with technical expertise and a strong physician presence on both sides of the Maryland General Assembly. Dr. Fastow said that Med Chi would be actively involved in the selection process for members to the Health Care Access and Cost Commission (HCACC).

Dr. Fastow noted he was the last Council chairperson who would also act as chairperson of the Executive Committee. Dr. Fastow mentioned that the bylaw changes to expand the Executive Committee from 7 to 11 members and to change the Executive Committee chairperson from the Council chairperson to the Med Chi president were fundamental changes in the way Med Chi has operated. After serving in both positions, he believed more than ever that the two should be separated. Dr. Fastow noted that he believes strongly in Council, as it is the place Med Chi members come together to argue issues, build consensus, and air views. He noted that there had been over 90% attendance at Council meetings over the last two years. He concluded by stating that it had been a great honor to serve Med Chi and thanked the House of Delegates.

b. Emeritus membership. The chairperson stated that if there were no objections, the House of Delegates would dispense with the reading of the emeritus member list, since the names had been published in the agenda as follows:

Anne Arundel County
- Kurt R. Fiedler, M.D.
- Roy V. Land, M.D.
- William C. Weintraub, M.D.

Baltimore City
- Albert M. Antiltz, M.D.
- Donald M. Barrick, M.D.
- Ralph K. Brooks, M.D.
- William P. Horton, M.D.
- Henry E. Langenfelder, M.D.
- Lyle J. Millan, M.D.
- Kurt Raab, M.D.
- Richard D. Richards, M.D.
- Gerald L. Russo, M.D.
- Gerhard Schmeisser Jr., M.D.
- Carlton L. Sexton, M.D.
- Aytekin Ulgen, M.D.

Baltimore County
- Danilo R. Coronel, M.D.
- Morton J. Ellin, M.D.
- Frank T. Kasik, Jr., M.D.
- Melvin D. Kopilnick, M.D.
- Henrietta Moritz, M.D.
- William F. Rienhoff, M.D.
- Stanley B. Rosendorf, M.D.
- Mehdi L. Yeganeh, M.D.
- H. Margaret Zassenhaus, M.D.

Carroll County
- Octavio A. Ruiz, M.D.

Garrett County
- Gordon H. Earles, M.D.

Harford County
- John A. Carriere, M.D.

Kent County
- John G. Morani, M.D.

Montgomery County
J. F. Barr, M.D.
Edward A. Beeman, M.D.
Donald L. Burnham, M.D.
Ronald R. Cameron, M.D.
Donald E. Dillon, M.D.
Lennard G. Gold, M.D.
Philip A. Kapp, M.D.
Sydney Leventhal, M.D.
Frank Mate, M.D.
James P. McCarrick, M.D.
Jay W. McRoberts, M.D.
George I. Mishtowt, M.D.
Jose M. Molina, M.D.
Murray Paul, M.D.
Peter D. Protos, M.D.
Theresa G. Reed, M.D.
Laurence E. Rubin, M.D.
Alan W. Winshel, M.D.
Prince George's County
Emedita E. Quintos, M.D.
Arthur Shaver, M.D.
Dimitri Zafiropulos, M.D.
Wicomico County
Elias S. Adamopoulos, M.D.
Orlando A. Balea, M.D.
Oliver J. Thoms, M.D.
Affiliates
Richard H. Doss, M.D.
Joseph J. Noya, M.D.

◆ Waiver of dues

The following members were granted a waiver of dues:
Baltimore City
Jerel I. Katz, M.D.
Patricia A. McIntyre, M.D.
Baltimore County
Nathan L. Centers, M.D.
Franklin D. Israel, M.D.
Govind Madhiraju, M.D.
Harford County
Gunther D. Hirsch, M.D.

◆ Reference Committee report

The chairperson noted that the House of Delegates had been mailed the resolution submitted by the Baltimore County Medical Association. A public hearing was held on March 9, 1993. Murray A. Kalish, M.D. (Baltimore City), chairperson of the Reference Committee, presented the committee's report. Dr. Kalish stated that the resolution was a goodwill resolution. It was the consensus of the committee, however, that the resolution's wording would require Med Chi's daily operations to go through the entire Executive Committee. The committee members thought that since Med Chi's daily operations were within the executive director's purview, approval of the resolution would cause gridlock and inaction. Therefore, it was the unanimous opinion of the Reference Committee members that the resolution should be rejected in its entirety.

The chairperson related that the House of Delegates could either accept the Reference Committee's recommendation, reject its recommendation, or refer the resolution back to the Reference Committee with directions. The House of Delegates accepted the Reference Committee's report and defeated the resolution.

◆ Bylaws report

The chairperson noted that members of the House of Delegates had been mailed a copy of the bylaws report. Alex Azar, M.D. (Wicomico County), chairperson of the Bylaws Committee, presented the Bylaws Committee report. The chairperson asked Dr. Azar to present the committee's report using the consent calendar procedure. Dr. Azar noted that the Bylaws Committee included Karl H. Weaver, M.D. (Baltimore City); Thomas E. Allen, M.D. (Baltimore County); Barton J. Gershen, M.D. (Montgomery County); Reynaldo L. Lee-Llacer, M.D. (Prince George's County); Michael J. Dodd, M.D. (southern Maryland); and J. Ramsay Farah, M.D. (western Maryland).

Items not extracted. After Dr. Azar presented the committee report, items 2, 4, and 7 were extracted for later discussion and individual vote. The chairperson then asked for a vote to adopt items 1, 3, 5, 6, and 8. Those items were as follows:

1. Proposed bylaw amendment to Article VII—Council, Section 2, (10). Amend article as follows ([Brackets] indicate deletion, and CAPS indicate change.):

> **Section 2.** The Council shall have all power and authority over the affairs of the House of Delegates, except that of modifying any action taken by the House of Delegates, and shall have power to: (1) issue charters to component societies; (2) recommend assessments; (3) remit a member's dues or assessment; (4) approve the budget; (5) appoint one or more assistant secretaries or assistant treasurers; (6) fill vacancies among the elective officers and those appointed by it; (7) fix the date and place of general meetings; (8) appoint an editor of the *Maryland Medical Journal* for a term of three years or until his or her successor is appointed; (9) set the amount of bond on the treasurer, the premium to be paid by the Faculty; AND (10) [retain counsel to the Faculty for a one-year period; and (11)] select independent certified accountants to audit the treasurer's accounts and report to the annual session of the House of Delegates.

3. Proposed bylaw amendment to Article XI—Committees, Section 22. Amend article as follows ([Brackets] indicate deletion, and CAPS indicate change.):

> [**Section 22.** A Medical Committee shall join with the corresponding committee of the Maryland State Bar Association, composed of an

equal number of members, for the consideration of problems common to, or of concern to, both the medical and legal professions. Its chairperson and members shall be appointed by the president. The tenure of office for this committee shall be one year and shall commence at a time that is mutually agreeable with the Maryland State Bar Association, so as to ensure that individual members shall serve conjointly with their respective counterpart members.]

5. Proposed bylaw amendment to Article XII—Physician's Defense. Amend article as follows ([Brackets] indicate deletion.):

Section 2. A panel may be convened to generally discuss the member's case and may make recommendations and give opinions regarding it. [General counsel for the Faculty shall be available for consultation purposes as an incident to Physician's Defense.]

6. Proposed bylaw adjustment to Article III—Finance, and to Article I—Component Societies. Move Article III, Section 1, to Article I, Section 7. The section reads as follows:

Section 1. On or before January 31 each year, the secretary of each component society shall forward to the secretary of the Faculty (1) a list of the component societies' officers and (2) a list of the delegates and alternates to the House of Delegates.

8. Proposed bylaw amendment to Article VII—Council, **Section 6.** The section reads as follows ([Brackets] indicate deletion, and CAPS indicate change.):

The Council shall employ under contract [an executive director] A CHIEF EXECUTIVE OFFICER who shall report and be responsible to the Council....

All of the non-extracted items (1, 3, 5, 6, and 8) were approved.

Items extracted. The chairperson then asked Dr. Azar to read each extracted item for discussion.

2. Proposed bylaw amendment to Article VII—Council, Section 6. Amend article as follows ([Brackets] indicate deletion, and CAPS indicate change.):

Section 6. The Council shall employ under contract an executive director who shall report and be responsible to the Council. He/she shall be the executive and general manager of the affairs of the Faculty and have authority to employ, discharge, and fix the compensation of personnel [in accordance with the provisions of the personnel policies established by the Council].

Louis C. Breschi, M.D. (Baltimore County), noted that Baltimore County would like to amend this item by substituting in place of "Council," "Executive Committee," because in the past, the Executive Committee had employed the executive director. John H. Hebb, M.D. (Baltimore County), inquired whether a personnel policy was in place at Med Chi. Angelo J. Troisi, FACHE, executive director, stated it was. Albert L. Blumberg, M.D. (Baltimore County), noted that the Executive Committee is no longer an Executive Committee of Council, but an Executive Committee of the Faculty. Dr. Blumberg noted that the Executive Committee had approved Mr. Troisi's contract.

Mayer C. Liebman, M.D. (Baltimore County), asked why the Bylaws Committee had suggested that the phrase "in accordance with the provisions of the personnel policies established by the Council" be deleted from this section. Dr. Azar explained that many personnel policies were set by both federal and state regulations; therefore, Council would not be able to establish personnel policies. He explained that Med Chi personnel policies are established by the Personnel Department according to federal and state statutes as they are in other corporations. The policies are then reviewed by the general counsel and the chief operating officer before being submitted to the executive director. Dr. Azar also noted that the proposed change would be micromanagement, and Council had voted previously to do away with micromanagement.

Dr. Liebman spoke against the amendment; he thought that the executive director should be responsible to Council. Joseph S. Fastow, M.D. (Calvert County), spoke against Baltimore County's amendment. Dr. Fastow noted that Council had asked the Executive Committee to finalize Mr. Troisi's contract. Dr. Fastow could not understand why Mr. Troisi's contract had not been finalized previously. Dr. Blumberg noted that Mr. Troisi's contract had been approved in 1989. Dr. Blumberg inquired where the decision to extend Mr. Troisi's contract had occurred, since if his contract started in 1989, the five years would have ended in 1994. Dr. Fastow noted that the contract goes into effect when it is signed, and it was not signed until 1993.

Carol W. Garvey, M.D. (Montgomery County), asked for a point of clarification. She noted that the amendment dealt with Council, and Council had two different positions in the amendment: the executive director should be responsible to Council as the current bylaw is written; and "in accordance with personnel policies established by the Council." Dr. Garvey noted that the latter statement was an inaccurate provision, and the House of Delegates was being asked to delete an obsolete and inaccurate provision. She noted that personnel policies were established by Med Chi, not by Council, but in fact, the executive director has been and will be responsible to Council. This does not mean micromanagement; it means being responsible. Mr. Everton, acting as parliamentarian, ruled the suggested change substantive in nature and, therefore, inappropriate.

J. David Nagel, M.D. (Baltimore County), made a motion to refer the amendment back to the Bylaws Committee. Paul A. Stagg, M.D. (Dorchester County), spoke against the motion. He noted that the matter at hand was whether the executive director would have the authority to deal with Med Chi personnel policies. Dr. Nagel noted that to refer back is not debatable. Dr. Garvey asked for a point of clarification. She asked whether the entire resolution, not just the amendment was to be referred back to the Bylaws Committee. Dr. Azar thought that Dr. Nagel was incorrect because the bylaws

information was mailed out in a timely manner—at least 30 days prior to today's meeting—and everyone had had time to review the information.

The chairperson noted that a motion was on the floor to refer the amendment back to the Bylaws Committee. Joseph Snyder, M.D. (Montgomery County), president-elect, noted that a motion to refer is debatable. There again was a question about what was being referred. It was noted that the amendment should be dealt with separately. A ruling from the acting parliamentarian was requested.

Mr. Everton said that the amendment was not before the body at all, and the question was whether item 2 should be referred back to the Bylaws Committee. If it were referred back, it could be reconsidered and the amendment could be added. He noted that a vote against referral would mean that the information would have to be addressed today. The House of Delegates voted to refer the bylaws amendment back to the Bylaws Committee.

4. Proposed bylaw amendment to Article XI—Committees, Section 44. Amend article as follows (CAPS indicate change):

> **SECTION 44.** A SELF-REFERRAL COMMITTEE OF AT LEAST NINE MEMBERS SHALL BE APPOINTED BY THE PRESIDENT WHO SHALL ALSO APPOINT THE CHAIRPERSON. THE COMMITTEE SHALL USE THE AMA'S COUNCIL ON ETHICAL AND JUDICIAL AFFAIRS' GUIDELINES ON SELF-REFERRAL TO REVIEW AND ANALYZE SPECIFIC SITUATIONS. THE COMMITTEE SHALL BE AUTHORIZED TO RECEIVE INQUIRIES FROM PHYSICIANS REQUESTING WHETHER AN ARRANGEMENT MEETS THE AMA GUIDELINES. THE COMMITTEE MAY REVIEW AS NECESSARY ANY COMPLAINTS WHEREIN THERE IS AN ALLEGATION OF INAPPROPRIATE PHYSICIAN SELF-REFERRAL. THE COMMITTEE SHALL DETERMINE THE MECHANISM FOR CONDUCTING ITS BUSINESS AND THE MANNER BY WHICH SELF-REFERRAL SITUATIONS MAY BE REFERRED TO THE COMMITTEE.

Samuel I. O'Mansky, M.D. (Baltimore City), noted that Baltimore City opposed the creation of a standing committee on self-referral because the amendment was proposed before the state legislature passed legislation prohibiting self-referral. He stated the committee would have no power, would be an added Med Chi expense, and would accomplish nothing. An ad hoc committee could be created at a later date if it became necessary. Jose Martinez, M.D. (Baltimore County), stated he was speaking on behalf of himself. He supported the formation of a self-referral committee, but suggested the following changes to the wording of the amendment. On line 15, strike the word "utilize" and substitute the word "consider"; on line 16, strike the word "to" and replace it with "in its"; on line 17 strike the word "analyze" and substitute "analysis of"; and on line 19, strike the "AMA" and replace it with "the Committee's." He also suggested another change to the amendment as follows: "The committee should recommend to Med Chi proposed legislative activities based on its studies of legislation or regulations dealing with self-referral." Dr. Martinez moved, since he was suggesting substantive changes, that the amendment be referred back to the Bylaws Committee. The motion was seconded.

Paul A. Stagg, M.D., noted that he was opposed to the motion to refer. If the motion were defeated, he wanted to return to explain why he thought the motion should not be referred.

J. David Nagel, M.D., noted that previously when a bylaws change was suggested, the Baltimore City Medical Society had instructed the Bylaws Committee on amendments to be brought to the House of Delegates. Therefore, Dr. Nagel wondered why these changes, if they were referred by the House of Delegates, were being referred back to the Bylaws Committee. He noted that he would speak against referral. Dr. Azar noted that the bylaw amendment being discussed was referred by Council to the Bylaws Committee. Dr. Martinez noted that his amendments were not "House" amendments, but were "personal" amendments.

Carol W. Garvey, M.D., spoke against the motion to refer because she thought it was appropriate to deal with the issue now since the self-referral law would not restrict self-referral for the next three years.

Dr. Nagel asked the House of Delegates to allow J. Ramsay Farah, M.D. (Washington County), who was not a delegate, to speak. Since there was no objection, Dr. Farah addressed the House of Delegates. He noted that the present legislation set the pace on self-referral; it was not a dead issue. He explained that self-referral will occur, and the study that will be undertaken regarding this issue will need to be evaluated, and recommendations will have to formulated by Med Chi. If Med Chi does have a standing committee on self-referral, there is the possibility that the foregone conclusion will be that all self-referral is no good, which, he noted, was against AMA policy. He recommended that the House of Delegates establish a self-referral committee that would monitor, evaluate, and help Med Chi to do the necessary studies. He stated that Med Chi's recommendations on this issue do follow its policies.

Dr. Martinez requested to withdraw his motion to refer. Dr. Yosuico noted that since the motion was on the floor, it could not be withdrawn since it had been debated. The chairperson called the question on referring the recommendation back to the Bylaws Committee. The motion was not referred back to the Bylaws Committee.

The chairperson noted that there was a motion on the floor. The motion was to approve or not approve the amendment as mailed to the members of the House of Delegates.

Dr. Stagg noted that he had the honor to be chairperson of the Ad Hoc Committee on Self-Referral, which had been created to study self-referral. While he understood why there might be a question about what a standing committee on self-referral might do since there was now legislation on

the issue, the law had only been passed but not implemented, and the law calls for a study, which should have input from organized medicine. Dr. Stagg recognized that the legislature had inquired during testimony on the self-referral bill what Med Chi had done. Med Chi's answer was limited to stating that a committee that had made recommendations had been formed. The legislature thought Med Chi did not have substantial enough information to determine the issue. Dr. Stagg thought that if Med Chi had had a standing committee in place, with its own criteria and specific information to present, the legislature would have been satisfied. Additionally, Dr. Stagg thought that with the present self-referral legislation in place, there will be a need for review of the issue in the future. A standing committee could easily offer its services to the BPQA or to whatever organization will be implementing the legislation. In conclusion, Dr. Stagg thought it would be beneficial for Med Chi to have a standing self-referral committee, and he did not think it would be costly.

Gary L. Rosenberg, M.D. (Baltimore City), remarked that the bylaws for the proposed self-referral committee were so narrowly drawn that if the House of Delegates approved a standing committee, it would not be able to study the self-referral report because the report would not be within its purview. Dr. Rosenberg thought the bylaws as presented only set up a review mechanism, and further bylaw changes would be needed to increase the responsibility of a self-referral committee.

Dr. Martinez again presented the above-mentioned amendments to enlarge the jurisdiction of the proposed self-referral committee. Dr. Martinez also stated that he had served on the ad hoc committee and thought that a standing self-referral committee should be created.

The chairperson noted that this was an amendment. The amendment was seconded. At this point, Dr. Azar noted that several members of the audience thought that change was substantial and that a ruling of the chairperson was needed. The chairperson ruled that the changes were substantial. Dr. Rosenberg challenged the ruling. The House of Delegates did not agree with the chairperosn.

Margaret T. Snow, M.D. (Montgomery County), asserted that Dr. Martinez was only trying to improve the language of the bylaws, allowing the committee to have more freedom from the AMA, which Dr. Snow thought was proper. Dr. Azar said, speaking as chairperson of the Bylaws Committee, that he did not have objections to the recommended changes and did not think the members of the Bylaws Committee would either.

The chairperson called the motion: the amendments presented by Dr. Martinez. The House of Delegates voted in favor of the amendments.

The amended bylaw was then presented for vote. The amended bylaw was approved by the House of Delegates.

7. Proposed bylaw amendment to Article VIII—Executive Committee, Section 2. Amend article as follows ([Brackets] indicate deletion, and CAPS indicate change.):

> **Section 2.** The Executive Committee shall act in an advisory capacity to the officers and staff in questions of immediate importance in the interim between meetings of the Council [and], shall perform such other duties as the Council may from time to time deem expedient AND APPROVE THE LOBBYIST SELECTED TO REPRESENT THE FACULTY AT THE MARYLAND GENERAL ASSEMBLY FOR A ONE-YEAR PERIOD.

Carol L. Bender, M.D. (Montgomery County), asked for clarification of the issues. She vocalized that too much time was being spent discussing issues and "going out to left field." Dr. Yosuico said that although he agreed, he had to allow anyone who wished to speak to do so.

Marion Friedman, M.D. (Baltimore City), said that the Baltimore City Medical Society was against the proposed amendment because it was a form of micromanagement. He contended that the executive director was responsible for hiring employees and should be held responsible by the membership. If members had no faith in him, they should not continue his employment. Dr. Friedman noted that a lobbyist has not always been a part of Med Chi. He thought a lobbyist from the outside was a temporary measure. The way the amendment was worded suggested that Med Chi would have a lobbyist every year.

Thomas E. Allen, M.D. (Baltimore County), noted that Council had voted to allow the Executive Committee to approve the hiring of the lobbyist. As a member of the Bylaws Committee, he was of the opinion that Dr. Azar had been a fair and reasonable chairperson. He noted that the amendment was approved unanimously by the Bylaws Committee. The amendment protected the executive director by having the choice ratified by the Executive Committee.

Howard L. Siegel, M.D. (Montgomery County), announced that physicians need to become more involved in the political process. He thought it was important for Council to consider the choice of a lobbyist and, therefore, spoke against the amendment.

Donald S. Stepita, M.D. (Montgomery County), suggested the motion be voted down. He reminded the House of Delegates that there had been a highly contested appointment of an outside lobbyist during the last session and thought that if the entire Council had the opportunity to discuss the hiring of a lobbyist, it would avoid the problems presented previously. Dr. Stepita thought the motion should be voted back so that it could be added to Article VII, Section 2.

Dr. Martinez recommended, as an individual, to oppose the amendment. He thought it was not in Med Chi's interest to limit a lobbyist's term because continuity was needed in dealing with the legislature.

Frederick J. Hatem, M.D. (Harford County), spoke in favor of the amendment. He thought it would be a waste of time to

have a lobbyist submit his application to Council. It would cause Med Chi difficulty in obtaining a lobbyist of any renown. In answer to the questions raised by Baltimore County, Dr. Hatem made a motion to amend the bylaws as follows: on line 19, after "expedient," add "including approving a lobbyist if one is selected to represent the Faculty at the Maryland General Assembly" and remove "for a one-year period." The motion was seconded.

Dr. Allen thought the motion would be acceptable to Baltimore County. Dr. Azar stated it was acceptable to the Bylaws Committee. Dr. Martinez spoke against the amendment because he thought that included in the duty to approve was the power to veto.

Dr. Blumberg asked for a point of order. He noted that since the Bylaws Committee accepted the amendment, it was now considered a friendly amendment. Thus, what was now being discussed was the amended motion. The chairperson reaffirmed this.

Reynaldo L. Lee-Llacer, M.D. (Prince George's County), did not think the amendment could be accepted as a friendly amendment. Dr. Rosenberg stated that accepting the friendly amendment would mean the Executive Committee would approve an in-house lobbyist. He asserted that this violated the previous principles established that the executive director would have the discretion to hire full-time people. The language assumes there is going to be an outside lobbyist, as well as an in-house lobbyist, and Dr. Rosenberg did not think Med Chi had made such a decision.

Dr. Azar asked for a point of order. He stated that Dr. Lee-Llacer was correct, that once a motion is on the floor, it cannot be accepted as a friendly amendment. Dr. Bender called the question on the amendment. The House of Delegates approved the amendment.

Dr. Bender stated that she thought the Executive Committee should select the lobbyist. The executive director had recently received a five-year contract, and if membership is saying that they do not agree with the executive director's lobbyist choice, they should ask the executive director to resign; it could prove very costly. Therefore, as a compromise, Dr. Bender thought that the Executive Committee should make the decision.

Dr. Allen noted that referring the matter to Council was not accepted by the Bylaws Committee. If the amendment was referred back to the Bylaws Committee for consideration, the committee would not approve it. Dr. Allen thought that the amended amendment was a reasonable compromise.

The chairperson called the motion. The motion was passed as follows:

> **Section 2.** The Executive Committee shall act in an advisory capacity to the officers and staff in questions of immediate importance in the interim between meetings of Council and, shall perform such other duties as Council may from time to time deem expedient including approving the lobbyist if one is selected to represent Med Chi at the Maryland General Assembly.

◆ *Maryland Medical Political Action Committee report*

John T. Lynn, M.D. (Prince George's County), chairperson of the Maryland Medical Political Action Committee (MMPAC), noted that there had been no increase in MMPAC membership during the past year. In the past, MMPAC had won awards for increased membership. Dr. Lynn thought there were many reasons for the lack of an increase in membership:

- ✧ Increase in specialty society PACs
- ✧ Increase in PACs by larger component societies
- ✧ Increase in physician employment in health corporations, health maintenance organizations, three medical schools, and the National Institutes of Health, and a decrease in private practice assignments
- ✧ Physicians deferring to their corporations on legislative issues.

Dr. Lynn stated that strict election and antitrust laws restricted MMPAC from working with other medical PACs in the state. This situation dilutes medicine's impact; a single state PAC would be much more effective. Dr. Lynn hoped that new political issues having an impact on the medical profession will remind physicians that they are doctors first, and generalists and specialists second. He noted that members are licensed and disciplined as physicians. Physicians are patient advocates. By joining MMPAC, members would have a unified and common voice on legislative issues. He asked members to join MMPAC if they were not presently members.

◆ *Treasurer's report*

Albert L. Blumberg, M.D., treasurer, noted that in 1991, Med Chi had a budget with a projected deficit of $47,000; at the end of the year, however, there was only a $25,000 deficit. In 1992, a deficit of $49,000 was projected. Dr. Blumberg noted the audit for 1992 was being completed, and Med Chi should know shortly what the deficit was. The 1993 budget shows a $50,000 balance because money was put into reserves. Dr. Blumberg noted that there might be some additional funds in 1993 because of personnel changes.

It was his opinion that because of present legislative changes in the health care field, Med Chi would have a decrease in membership. The decrease in out-of-state members would decrease funds for Med Chi's physician rehabilitaion and peer review programs. Because of these factors, a dues increase might be needed in 1994; there has not been a dues increase since 1979. Dr. Blumberg remarked that Joseph Harrison had made Dr. Blumberg's life easier and more bearable during his two years as treasurer, and he publicly acknowledged Mr. Harrison's contributions as comptroller to Med Chi. Dr. Blumberg stated that the budget will be published this summer.

◆ Statements by Carol Bender, M.D.

Carol Bender, M.D., asked to make statements regarding the MMPAC and the treasurer's report. She wished to address the apathy of Med Chi and the decrease in membership because she thought they were related. The Montgomery County Medical Society is seeing physicians who question what the medical society is doing for them and who are dropping out. She further related that this points to the fact that there must be an urgent problem to be addressed.

◆ Nominating Committee's report

J. David Nagel, M.D., chairperson of the Nominating Committee, presented the Nominating Committee report as follows:

✧ *President-elect:*
Joseph S. Fastow, M.D.

✧ *First vice-president:*
Alex Azar, M.D.

✧ *Second vice-president:*
J. Ramsay Farah, M.D.

✧ *Third vice-president:*
Thomas E. Allen, M.D.

✧ *Secretary:*
Paul A. Stagg, M.D.

✧ *Treasurer:*
Carol W. Garvey, M.D.

✧ *Finney Fund Committee:*
Robert G. Greenfield, M.D.

✧ *Delegates to AMA:*
Donald T. Lewers, M.D.
George S. Malouf, Sr., M.D.

✧ *Alternate delegates to the AMA:*
Carol W. Garvey, M.D.
Reynaldo L. Lee-Llacer, M.D.

In addition to the above slate of officers, the Nominating Committee had reviewed the actions of Council at its January 21, 1993, meeting concerning the vacancy for the AMA alternate delegate seat and asked that the House of Delegates reaffirm the action taken to have Jose M. Yosuico, M.D., fill the vacancy created by the untimely death of Dr. Raymond Atkins for the term ending December 31, 1994. The chairperson noted that the motion was to approve the action taken during the January 21, 1993, Council meeting to have Jose M. Yosuico, M.D., fill the vacancy created by the death of Dr. Atkins. The motion was reaffirmed.

Dr. Nagel noted that the following individuals were on the ballot for the BPQA vacancies:

Frederick P. Alpern, M.D.
Ira N. Brecher, M.D. (incumbent)
Irvin H. Cohen, M.D.
Sanford H. Eisenberg, M.D.
Lawrence C. Jones, M.D. (incumbent)
Charles Kaelber, M.D.
Suryabala B. Kanhouwa, M.D.
Santosh D. Kaushal, M.D.
Kenneth R. Lippman, M.D.
Lois H. Love, M.D.
Melvin Museles, M.D.
Joseph J. Reidy, M.D.
Michael K. Spodak, M.D.
Ronald J. Taylor, M.D.

Dr. Snyder asked the number of votes each person shall cast for BPQA vacancies. The chairperson said two votes; four names will be sent to the governor.

The chairperson asked if there were any other nominations for president-elect. John G. Newby, M.D. (Washington County), stated that there was, but he would like to preface the nomination with a few remarks. During the November 1992 Council meeting, when the action of the Executive Committee was presented for information only, Joseph Fastow, M.D., Council chairperson, told the members that if they did not agree with what he did, they could vote him out of office. Dr. Newby thought that statement was quite appropriate. Dr. Newby nominated Donald H. Dembo, M.D. (Baltimore City), for president-elect.

The chairperson asked if there were any further nominations. A motion was made and seconded to close the nominations for president-elect. The House of Delegates approved the motion.

Dr. Newby nominated Daniel I. Welliver, M.D. (Carroll County), for first vice-president. The chairperson inquired if there were other nominees for first vice-president. A motion and second to close the nominations were made. The nominations for first vice-president were closed.

The chairperson asked if there were any further nominations for second vice-president. There were no further nominations. The nominations for second vice-president were closed.

The chairperson asked if there were any other further nominations for third vice-president. There were no further nominations. Nominations were closed for this office.

The chairperson asked if there were any further nominations for secretary. Dr. Newby nominated Carol Bender, M.D. for the office of secretary. The chairperson asked if there were further nominations. There were no further nominations for secretary, and the nominations were closed.

The chairperson asked if there were any further nominations for treasurer. Dr. Newby nominated Albert L. Blumberg, M.D. The chairperson inquired if there were any further nominations. There were no further nominations, so the nominations were closed.

The chairperson asked if there were any further nominations for the Finney Fund Committee. There were no other nominations, and the nominations were closed.

The chairperson said that the nominees for delegates to the AMA for the period January 1, 1994, through December 31, 1996, were Drs. Donald Lewers and George S. Malouf, Sr. The chairperson asked if there were any further nominations for these positions. Dr. Newby nominated Frederick Miltenberger, M.D. (Washington County). Since there were no further nominations, the nominations for these positions were closed.

The chairperon noted that the two nominees for the AMA alternate delegate positions were Drs. Carol W. Garvey and Reynaldo L. Lee-Llacer. Dr. Newby nominated Louis C. Breschi, M.D. (Baltimore County), and Thomas E. Hunt, M.D. (Baltimore City). There were no further nominations, and the nominations were closed.

The chairperson noted that voting for the BPQA vacancies would take place the next day. Members of the House of Delegates and other physicians who were licensed in Maryland could vote.

The chairperson announced that ballots would be prepared for the contested offices, and voting would take place the next day at the second session of the House of Delegates. He further related that Article IV, Section 4, of Med Chi bylaws requires a ballot vote for all positions unless there is only one candidate for an office. In that case, the ballot may be dispensed with if the House of Delegates wishes to do so.

The chairperson asked Dr. Newby if the physicians he nominated would serve if elected. Dr. Newby stated that he had either spoken to, or those with whom he is associated with had spoken to, all the nominated individuals, and they had agreed to serve if elected. Dr. Snyder asked for a point of clarification. He noted that Dr. Blumberg had stated in a Council meeting that he would not run again for re-election and asked what changed his mind. Dr. Newby stated that Dr. Blumberg had told him that, but Dr. Newby said he told Dr. Blumberg that there were members who would like him to continue. Dr. Newby thought that if the membership voted for Dr. Blumberg, he would serve. He further stated that he held Dr. Blumberg in the highest regard, including his ethical standards.

The motion to not place the names of the uncontested positions on the ballot was brought to the floor. The House of Delegates approved the motion.

◆ *New business*

Dr. Bender made a motion that because of the lateness, a discussion of HB 1359 be tabled until the next day's session, and be placed as the first item on the agenda. It was noted that the election must be the first item of business when the second session began.

Dr. Nagel stated the membership had heard a lot of information regarding HB 1359; it was not going to be changed. He thought the question was how Med Chi was going to interface with the results of the bill. Dr. Nagel noted that there is an Ad Hoc Committee on Health System Reform, and that committee should look at how Med Chi is going to interface. Dr. Nagel urged the president-elect, when making appointments to that committee, to take into account everything he heard today from all sections because it was time for the House of Delegates to stop being split over this issue. Med Chi needed to go as one voice and not make decisions behind closed doors. Dr. Nagel moved that Dr. Fastow present to the House of Delegates tomorrow the report he had presented to Council today.

Rose Mary H. Bonsack, M.D. (Harford County), a member of the Maryland General Assembly House of Delegates, made a few comments about HB 1359. She stated that it was important for Med Chi to come to Annapolis with one voice, not divided. She has told Med Chi this for the last three years. She has had to fight to get Med Chi to decide what it wants to do. She also wished that when members served on committees, they understood that they must be available at any time to go to Annapolis and testify on bills of interest to their committee. Dr. Bonsack noted that HB 1359 started out as a 17-page bill. Over 400 amendments were presented, and the bill is now 77 pages. She concluded by stating again that when people are appointed to committees, Med Chi should make sure they are willing, committed, and available at any time to go to Annapolis. Dr. Bonsack thanked the members for their support, and thanked MMPAC for its support during the last three years.

Dr. Snyder stated that he thought HB 1359 was an immediate priority, and that there will be a working committee of the Executive Committee that will take the problem up and provide any information needed.

Dr. Bender said this bill was devastating and that many people do not know what was passed. She also thought it was not fair that physicians could not serve if they were not readily available to testify. Many physicians, because of their specialty, cannot be available on a moment's notice. That should, however, not exclude them from committee membership. She has letters from members of her component society who are offended by what has happened. They are offended by the sense that the Executive Committee has not conveyed the wishes of the majority of the membership. Although she heard today that we were losing, she had been in Annapolis and she thought that Med Chi was winning. She heard Casper Taylor state that after hearing from everybody, fee limits were withdrawn from the bill. Dr. Bender thought that Med Chi should have continued to pursue amendments to HB 1359; the membership feels let down, believing they have negotiated for nothing.

Alex Azar, M.D. commented on Dr. Bender's statements. Dr. Azar said that he asked the legislators point blank. He stated that the bill passed out of Senate committee, 44 to 2, in an unchanged, unmodified form. Both the Executive Committee and Dr. Bender worked very hard in trying to modify the bill. He resented what was being said and, as a member of the Executive Committee and a Med Chi member, he resented Dr. Bender's comments. He thought the type of comments made by Dr. Bender were very devisive to Med Chi.

While Dr. Azar was speaking, Dr. Bender asked Dr. Azar what his position was on HB 1359; did he agree to support the bill or not? Dr. Azar stated that he attended an emergency meeting of the Executive Committee on HB 1359. Present at that meeting were the lobbyist plus the internal Council members working on the bill. Dr. Azar noted that the Executive Committee was informed that if it took the position of totally opposing the bill, the Executive Committee would have absolutely no impact on the bill—that the Executive Committee could not modify it. By taking a position for the bill, however, the Executive Committee would be able to work to get a bill that was the best Med Chi could obtain—modified so Med Chi would not be in such an onerous position.

Again, Dr. Bender inquired what Dr. Azar's position was on the bill at that meeting. He stated that he supported the bill based on the information provided to the Executive Committee at that time. He supported the position to modify the proposed bill so that it would not be as onerous to physicians.

At this point, Dr. Nagel asked for a point of order. He asked the chairperson to rule the discussion out of order. The discussion was ruled out of order by the chairperson.

At that point, Dr. Nagel moved that any further discussion of the bill be tabled until the appropriate time as determined by the Speaker of the House of Delegates. Dr. Newby asked for a point of order, stating that delaying the discussion of the behavior of the Executive Committee on this bill was inappropriate; responsibility, responsiveness, and the ability of the House of Delegates to directly assign or praise responsibility and to reward or not reward members of the Executive Committee with higher office within Med Chi was directly related to its handling of HB 1359. To take the issue up at the next session of the House of Delegates was ridiculous because of the Executive Committee's complete change from opposition to this bill to support in a one-day span. Election of officers would either reward or punish those members who were responsible for this action. Dr. Newby thought, based on information from his senator, that Med Chi could have killed the bill. His senator told him that the legislature was for the bill because Med Chi was in favor of the bill.

A vote was taken on the motion to table the discussion until the appropriate time the next day. The House of Delegates voted to table the discussion until the next day's session of the House of Delegates.

◆ *Adjournment*

There being no further business, the meeting was adjourned at 6:10 p.m.

Respectfully submitted,
SECRETARY CAROL W. GARVEY, M.D.

❑ ❑ ❑



DR. JOSE YOSUICO, 1992-1993 MED CHI PRESIDENT, ACCEPTS A GOVERNOR'S CITATION FROM RAYMOND SCALETTAR, M.D., CHAIRPERSON OF THE AMA BOARD OF TRUSTEES.

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Minutes of the House of Delegates—340th session—May 1, 1993

◆ *Members present*

Allegany County
Hijab, Wally S.
Lavine, Philip H.
Miles, Leslie R. Jr.
Reyes, Francisco
Roque, Angel H.

Anne Arundel County
Alvarez-Velasco, Sergio
Ceccarelli, Leoncio A.
Gudwin, Arthur L.
O'Herlihy, Hilary T.
Ramirez, Jorge B.
Walman, A. Terry

Baltimore City
Burgan, Paul
Carozza, Nijole B.
Collins, Beverly A.
DeLeon, Augusto R.
Dembo, Donald H.
Dritsas, K. George
Edwards, Willarda V.
Folgueras, Albert
Friedman, Marion
Giargiana, Frank A. Jr.
Goldgeier, Sheldon
Haciski, Rafael C.
Hooper, Joseph H.
Hunt, Thomas E.
Jensen, Allan D.
Kalish, Murray A.
MacGibbon, John B.
Mintzer, Donald W.
Nahum, Albert
Nakazawa, Hiroshi
O'Mansky, Samuel I.
Rosenberg, Gary L.
Ross, Jerome
Shuey, Henry M. Jr.
Smoot, Roland T.
Soprey, Nisha P.
Vranian, George Jr.
Weaver, Karl H.
Yin, Robert L.
Yosuico, Jose M.
Zebley, Joseph W. III

Baltimore County
Allen, Thomas E.
Ballesteros, Rubin F.
Barranco, Frank T.
Bearman, Sheldon B.
Benkert, Marianne
Blumberg, Albert L.
Brecher, Herman
Breschi, Louis C.
Brookland, Robert K.
Davis, Alan Steven
DelCarmen, Benjamin V.
Dibos, Pablo E.
Edery, Esther
Ghiladi, A. Hamid
Gordon, John C.
Hagaman, Scott D.
Hebb, John H.
Hirata, Richard M.
Jolbitado, Deusdedit
Krager, John M.
Liebman, Mayer C.
Martinez, Jose
Nachlas, N. Edward Sr.
Nagel, J. David
Orrell, Ronald Jay
Sapre, Arun B.
Sherrard, Margaret L.
Siegel, Howard L.
Taylor, Kathleen E.
Taylor, Robert M.
Zakai, Ziaul A.

Calvert County
Fastow, Joseph S.
Panos, Alexander
Ross, Ronald J.

Carroll County
Welliver, Daniel I.

Cecil County
Fridberg, Andrew P.

Charles County
Sanchez, Guillermo E.

Dorchester County
Burdette, Lewis M.
Stagg, Paul A.

Garrett County
Leighton, Herbert H.

Harford County
Hatem, Frederick J.
Oteyza, Ben

Howard County
Bergmann, Frederick
Bianco, Emidio A.
Leffler, Allan T. II
Taylor, Charles E.

Montgomery County
Avrunin, Benjamin
Bender, Carol L.
Doman, David B .
Garvey, Carol W.
Genovese, Joseph J. Jr.
Kaufman, Peter N.
Longway, Ralph E.
Obayuwana, Alphonsus O.
Richards, Franklin D.
Rubin, Bruce E.
Schneider, Philip L.
Sherer, Peter B.
Snow, Margaret T.
Snyder, Joseph
Sussman, Eugene K.
Vaghi, Vincent J.
Weiszer, Isaac
White, Stephen W.

Prince George's County
Bayly, Brian S.
Blair, Willie C.
Dakheel, Riad
Goodman, Nelson G.
Goodman, Stuart J.
Jeffrey, John E.
Lee-Llacer, Reynaldo L.
Lee-Llacer, Zorayda M.
Lilly, John R.
Maldonado, Benjamin Jr.
Malouf, George S. Jr.
Malouf, George S. Sr.
Mufarrij, Imad
Nayeem, Abdul
Wilhelm, Frederick

Queen Anne's County
Smith, John R. Jr.

St. Mary's County
Moon, Youngsik
Navidi, Parviz

Talbot County
Fisher, Michael J.
Orsini, Roger A.
Smorzaniuk, Eva M.

Washington County
Ellis, Randy S.
Japzon, Francisco G.
Newby, John G.

Wicomico County
Azar, Alex
Reid, William
Saggar, Deepak
Smoot-Haselnus, Catherine N.

Worcester County
Arthes, Federico G.

Resident Component
Armstrong, Michael Jr.

Student Component
Redding, Stephanie D.
Swezey, Maureen J.

Specialty societies
Gerstenblith, Jay
Kohn, Daniel E.

Board of Physician Quality Assurance
Weiner, Israel H.

Component staff present
Neilson Andrews, Baltimore County Medical Association
Diane Briggs, Prince George's County Medical Society
Bernadette Lane, Baltimore City Medical Society
K. Edward Shanbacker, Montgomery County Medical Society

Executive staff present
Angelo J. Troisi, FACHE, executive director
Rose M. Matricciani, R.N., J.D., chief operating officer
Carmine M. Valente, Ph.D., deputy executive director
Angus Everton, J.D., general counsel

◆ Call to order

The 440th session of the House of Delegates was called to order by President Jose M. Yosuico, M.D., at 1:45 p.m. in the Chesapeake Room of the University of Maryland University College Conference Center, College Park, Maryland.

◆ Visiting dignitaries

- ✧ President-elect Thomas J. Maxwell, M.D., Delaware Medical Society
- ✧ Vice-president John H. Hobart, M.D., Pennsylvania Medical Society
- ✧ President George E. Broman, M.D., Virginia Medical Society
- ✧ Raymond Scalettar, M.D., AMA Board of Trustees chairperson
- ✧ Michael Murray, AMA senior vice-president

◆ Election of officers

a. Rules for nominating speakers. The president announced the rules for nominating speakers. Only one speaker per candidate, either the candidate or a spokesperson for that candidate, would be allowed. Each speaker would be limited to three minutes, and the secretary would hold up a "30-second" and then a "Time" sign. The president inquired if there were any objections to the presented procedure. There were no objections.

b. Tellers. The president appointed Drs. Hiroshi Nakazawa, Thomas E. Allen, J. RIchard Lilly, and Allan D. Jensen to serve as tellers for the election of contested positions. Dr. Nakazawa was asked to be chief teller. The election was to be by written ballot.

c. Speeches for nomineees.

◆ President-elect nominees ◆

Joseph S. Fastow, M.D., and Donald H. Dembo, M.D.

Joseph S. Fastow, M.D. Hilary T. O'Herlihy, M.D. (Anne Arundel County), spoke on behalf of Dr. Fastow (Calvert County). Highlights were as follows:

- ✧ Received M.D. degree from Boston University.
- ✧ Trained at the Philadelphia, George Washington, and Johns Hopkins hospitals.
- ✧ Is currently associate professor of medicine at Georgetown University.
- ✧ Is board certified in emergency medicine.
- ✧ Is a fellow of the American College of Emergency Physicians; from 1980 to 1982, was president of the Maryland Chapter.
- ✧ In 1991-1992, was president of the Calvert County Medical Society.
- ✧ Since 1985, has been a House of Delegates member and emergency room director at Memorial Hospital.
- ✧ Has been a councilor since 1987.
- ✧ From 1991 to 1992, was chairperson of the Policy and Planning Committee, which, during his tenure, increased Executive Committee membership from 7 to 11 members, which, in turn, enlarged the representation of the Med Chi decision-making body.
- ✧ From 1992 to 1993, was chairperson of Council. One difficult decision made during that time was hiring an in-house general counsel. Dr. O'Herlihy noted that most physicians he has talked to regarding this matter thought this was the correct decision.

- ✧ Dr. O'Herlihy said that Dr. Fastow was one of the hardest working physicians in a Med Chi leadership position that he has seen during the 25 years he has been a member.
- ✧ Dr. O'Herlihy noted that Dr. Fastow's decisions are well thought out and have Med Chi in mind.

Donald H. Dembo, M.D. Frederick Miltenberger, M.D. (Washington County), spoke on behalf of Dr. Dembo (Baltimore City), noting the following:

- ✧ Has known Dr. Dembo for over 20 years and has utmost respect for him.
- ✧ Is presented as a nominee on a reformed slate of officers.
- ✧ Is extremely well qualified as a physician and a medical citizen.
- ✧ Has been president of the Maryland Society of Cardiology and the American Heart Association.
- ✧ Is presently chief of cardiology at Good Samaritan Hospital and a teaching scholar at Sinai Hospital.
- ✧ Holds the position of assistant professor at Johns Hopkins.
- ✧ Lectures nationally and internationally.
- ✧ Is involved in health system reform and is liaison from the American College of Cardiology to Congressperson Ben Cardin.
- ✧ Has testified for Med Chi in Annapolis for at least 20 years, and Dr. Miltenberger thought that Dr. Dembo had been an extremely effective spokesperson for Med Chi in Annapolis.
- ✧ Chaired the Med Chi Committee on Managed Care and Third-Party Liaison for several years.
- ✧ Is president-elect of, and councilor from, the Baltimore City Medical Society.

◆ First vice-president nominees ◆
Alex Azar, M.D., and Daniel I. Welliver, M.D.

Daniel I. Welliver, M.D. Daniel I. Welliver, M.D. (Carroll County), spoke on behalf of himself.

- ✧ He noted that he has been active in Med Chi for over 35 years, serving on the Executive Committee and Council.
- ✧ He is also a member of the Board of Physician Quality Assurance.

Alex Azar, M.D. Alex Azar, M.D. (Wicomico County), spoke on behalf of himself. He noted the following:

- ✧ Most members know what Dr. Azar stands for, which is a united Med Chi front, and he has always tried to put the best interest of Med Chi in the forefront.
- ✧ Thinks dissent is important in an organization and has always supported dissent.
- ✧ Is opposed to block seating and voting.
- ✧ Thinks physicians have gone through more rigid screening than any other profession. Physicians have to be topnotch to get into medical school, to complete medical school, and to practice medicine.
- ✧ All his efforts have been focused on doing what is best for Med Chi.
- ✧ Admitted that he has made mistakes, but has made the best decisions he could based on available information, and has tried to listen to the other side.

◆ Secretary nominees ◆
Carol L. Bender, M.D., and Paul A. Stagg, M.D.

Carol L. Bender, M.D. Carol L. Bender, M.D. (Montgomery County), spoke on behalf of herself and noted the following:

- ✧ Physicians are highly educated.
- ✧ When politicians deal with physicians, the politicians ask the physicians to forget their years of training and sacrifice. Physicians, however, have dedicated their careers and lives to giving care and service to others. Therefore, physicians are patient advocates and caretakers.
- ✧ Would like to be Med Chi's advocate.
- ✧ Advocacy career was born when Medicare fees became a problem, which affected her livelihood.
- ✧ Singlehandedly led a proxy fight against the Medical Mutual Liability Insurance Society of Maryland (Med Mutual), which wanted to insure attorneys. She thought this would be a massive conflict of interest since the attorneys would testify in Annapolis against tort reform, stating it would not make any difference on insurance premiums anyway. Med Mutual also wanted to deprive Med Chi of a seat on its board of directors and was generally hostile to physicians. Dr. Bender further stated that because of the proxies she obtained, the Med Chi executive director now sits on the Med Mutual board of directors.
- ✧ Has testified in Annapolis on mandatory Medicare assignment and, during the recent legislative session, testified and rallied against HB 1359.
- ✧ Asked the House of Delegates to look at her many years of experience with major issues. Dr. Bender stated that she is respected in the political arena. She went on to say that she offers "absolute honesty, integrity, purpose, and dedication."

Paul A. Stagg, M.D. Paul A. Stagg, M.D. (Dorchester County), spoke on behalf of himself. He noted the following:

- ✧ Graduate of Louisiana State University School

of Medicine.

- ✧ After residency, received certification from the board of surgery.
- ✧ Spent some years in US Air Force and then settled in Dorchester County, where he has been for about 19 years.
- ✧ Has been a Council and House of Delegates member for several years and a member of several Med Chi committees.
- ✧ During this annual meeting, received a certificate commending his leadership of the Ad Hoc Committee on Self-Referral.
- ✧ Is interested in being a Med Chi leader because he believes Med Chi is vitally important to physicians, to patients, and to the health of the men, women, and children throughout the state. Med Chi has to be able to deal with all the legal and economic issues coming up. This can only be done with the proper presence in Annapolis.

◆ Treasurer nominees ◆
Albert L. Blumberg, M.D., and Carol W. Garvey, M.D.

Albert L. Blumberg, M.D. Albert L. Blumberg, M.D. (Baltimore County), spoke on behalf of himself. He began by noting that in January he informed Council he was not planning to seek office. He also stated that he has been promised by the Council chairperson that issues Dr. Blumberg was trying to address within the organization would be addressed. Since he did not wish his candidacy to diffuse focus from what he thought were the important issues of Med Chi governance and accountability, he withdrew his name for consideration for treasurer. He also asked the House of Delegates to consider delegates from Baltimore County whose names had been placed on the ballot for other leadership positions.

At this time, the chairperson noted that the office of treasurer was uncontested and congratulated Dr. Garvey. Dr. Garvey thanked the House of Delegates for the position and its support.

◆ AMA delegate nominees ◆
Donald T. Lewers, M.D.; George S. Malouf, Sr., M.D.; and Frederick Miltenberger, M.D.

Donald T. Lewers, M.D. George S. Malouf, Sr., M.D. (Prince George's County), spoke on behalf of Dr. Lewers (Talbot County), even though Dr. Malouf was also running for the position. Dr. Malouf noted the following:

- ✧ Has known Dr. Lewers for many years.
- ✧ Has served as vice-chairperson of the AMA delegation.
- ✧ Dr. Lewers is past president of Med Chi, past chairperson of Council, and has been a delegate to the AMA for several years.
- ✧ Dr. Lewers has been a real leader at the AMA in that he served on the AMA's Legislative Committee; he is now chairing that committee. Dr. Malouf noted that seniority and longevity at Med Chi counts at the AMA level. Effectiveness at the AMA level comes only after many years of labor. Therefore, Dr. Malouf thought the House of Delegates should support Dr. Lewers for AMA delegate.

George S. Malouf, Sr., M.D. Allan D. Jensen, M.D. (Baltimore City), spoke on behalf of Dr. Malouf (Prince George's County), whom he has known for over 12 years.

- ✧ Dr. Jensen noted that everyone knows Dr. Malouf well.
- ✧ Dr. Malouf is a practicing ophthalmologist and has been a Med Chi president.
- ✧ Is a gentleman, and is effective, diplomatic, and honest.
- ✧ Has the ability to get things done.
- ✧ Is able in meetings to lead a group in making a decision in the right direction when members are having problems doing so.
- ✧ Is influential and belongs to many civic and religious organizations.
- ✧ Is very generous with his time and other resources.
- ✧ Has received the highest AMA award for humanitarian services—the Benjamin Rush Award.
- ✧ Is an effective and wonderful spokesperson for Maryland.

Frederick Miltenberger, M.D. Frederick Miltenberger, M.D. (Allegany County), spoke on behalf of himself, noting that he was asked to put his name up for this slot and was willing to do so. He told the House of Delegates that if it wanted a fresh face, he was willing to serve.

◆ AMA alternate delegate nominees ◆
Louis C. Breschi, M.D.; Thomas E. Hunt; Reynaldo L. Lee-Llacer, M.D.; and Carol W. Garvey, M.D.

Louis C. Breschi, M.D. John H. Hebb, M.D. (Baltimore County), spoke on behalf of Dr. Breschi (Baltimore County).

- ✧ Dr. Breschi is an incumbent to the position, and seniority and longevity are important to the position.
- ✧ Dr. Breschi has served Med Chi well for a long time; his medical career has been one of dedication to Med Chi.
- ✧ Has been president of Franklin Square Hospital.
- ✧ Has been on the Committee of Professional Ethics for 10 years and has chaired the committee for 5 years.
- ✧ Has been on the Physician/Patient Relations Committee for 21 years and has also chaired that committee. Has served on four other Med Chi committees.
- ✧ Is a well-known expert on ethics and is constantly

consulted by judges, lawyers, and legislators; Dr. Breschi is in a good position to give an opinion.

- ✧ Dr. Hebb noted that the Baltimore County Medical Association endorses Dr. Breschi's candidacy, and asked that the House of Delegates send Dr. Breschi back to the AMA where his talents are needed.

Thomas E. Hunt, M.D. Donald H. Dembo, M.D. (Baltimore City), spoke on behalf of Dr. Hunt (Baltimore City). Dr. Dembo noted the following:

- ✧ Dr. Hunt is a gentleman.
- ✧ Is in private practice and is an orthopaedic surgeon.
- ✧ Is president of the University of Maryland Alumni Association, president of the Baltimore City Medical Society, and past president of the Maryland Orthopaedic Society—he knows leadership.
- ✧ He knows and understands the needs and value of good communication skills.

Reynaldo L. Lee-Llacer, M.D. Reynaldo L. Lee-Llacer, M.D. (Prince George's County), spoke on behalf of himself.

- ✧ He stated he believes in teamwork because "a house divided cannot stand."
- ✧ Thinks working together is important and brings out the best in each member.
- ✧ Has served Med Chi and his county society for several years. At Med Chi, he has been chairperson of the Bylaws Committee for three successive presidents, was vice-chairperson of Council and chairperson of Council, and president-elect and president.
- ✧ Has traveled all over the state communicating Med Chi's message.
- ✧ Believes every member of the organization should be told what is being done for them.
- ✧ Asked for the support of the House of Delegates.

Carol W. Garvey, M.D. Bruce E. Rubin, M.D. (Montgomery County), spoke on behalf of Dr. Garvey (Montgomery County) and stated:

- ✧ Dr. Garvey is a person of great character and individuality.
- ✧ She is thoughtful and considerate of others.
- ✧ She hears and considers all sides of issues very thoroughly.
- ✧ Makes decisions with insight and knowledge of the subject matter.
- ✧ Exhibits excellent administrative skills and the ability to find consensus among her fellow physicians.
- ✧ Researches and knows the issues and represents constituents in an assertive and fair manner.
- ✧ Is an effective communicator. Oversees and guides others through the resolution of potential conflicts. Has been an effective, trustworthy, and loyal voice for her patients, for public health, and for the physician community.
- ✧ Has given generously and eagerly of her time.
- ✧ Has served Montgomery County Medical Society extremely well as its immediate past president and as chairperson of the Public Health Committee; has been an active member of the Executive Committee for years.
- ✧ Has served Med Chi on its Executive Committee as secretary for the last two years and on numerous committees: chairperson of the Ad Hoc Special Committee on Laboratory Regulations, the Ad Hoc Committee on Self-Referral, and subcommittees of the Public Health Committee.
- ✧ If elected, would be the only woman on the AMA delegation. Dr. Rubin thought that the delegation should be more broadly representative of medicine as a whole; almost 25% of physicians are women.
- ✧ Also, Montgomery County Medical Society, as the second largest Med Chi component society, has had no representation on the delegation for the last few years.
- ✧ Dr. Rubin concluded that for the type of leadership, character, and personality that Dr. Garvey has to offer, for the fact that she represents all women physicians of Maryland, and for the fact that Dr. Garvey represents Montgomery County, which has been terribly represented on the delegation, the House of Delegates should strongly support and vote for her.

d. Distribution of ballots. At this point, tellers distributed ballots, and the House of Delegates voted.

◆ *Auxiliary report*

Myrna Goodman, president of the Med Chi Auxiliary, presented the auxiliary's report. Ms. Goodman noted that the auxiliary's health program for 1992-1993 had been awareness and prevention of violence and breast cancer. The auxiliary plans to continue with these programs for the next year. Billboards displaying the message that mammography was the best weapon against breast cancer were placed in conspicuous sites by various counties; two billboards were sponsored by Med Chi. By the end of the month, the auxiliary planned to sponsor at least 30 free mammograms for indigent women in Maryland.

In legislative matters, the auxiliary worked closely with Med Chi and other medical societies to let legislators know their views on issues affecting the quality of health care. Ms. Goodman stressed the need for a united front if Med Chi wishes to gain the attention of those in Washington, DC. She emphasized that the support of every spouse and physician was

needed. A new partnership was necessary to see that the quality of health care is not sacrificed.

President Yosuico presented Ms. Goodman with a certificate of appreciation at the conclusion of her report.

◆ *Certificate of appreciation for Jose Martinez, M.D.*

The president personally thanked Dr. Martinez for his work during the legislative session. He presented Dr. Martinez with a certificate of appreciation. Dr. Martinez said he would cherish this tangible evidence of his efforts. He said he knew Dr. Yosuico has been behind him with moral support during the legislative session.

◆ *New business*

a. House Bill 1359. At this time, a motion was made to discuss HB 1359. The chairperson read the motion for informational purposes. Dr. Blumberg asked to submit a resolution with the permission of the House of Delegates.

Dr. Malouf asked for a point of order. He noted that since there was a motion on the floor, if no one wished to take any action, the matter should be dropped. Dr. Blumberg responded that the Baltimore County Medical Association wished to submit the following substitute resolution:

> Whereas passage of HB 1359 may result in global budgets by the establishment of cost goals;
>
> Whereas the bill contains no mandate for business to purchase insurance;
>
> Whereas the Medical and Chirurgical Faculty's support of the bill was achieved by coercion and threats; and
>
> Whereas this bill has elements contrary to current Med Chi policies (endorsement of Health Access America): Therefore, be it
>
> *Resolved,* That the Legislative Committee of Med Chi review current Med Chi policy as it applies to House Bill 1359, changes in Health Access America, and anticipated state and federal initiatives; and be it further
>
> *Resolved,* That this committee report to the House of Delegates at a special meeting July 15, 1993; and be it further
>
> *Resolved,* That the report consist of, but not be limited to, recommendations of necessary changes in Med Chi policy and/or state legislation.

Dr. Snyder noted that he had read the resolution. Although he did not agree with all the "whereas clauses," the resolution was something he had been planning to implement anyway, expanding it to include HB 1359 and to schedule a discussion as soon as feasible on the legislative effort. Dr. Snyder said he planned to review the legislative actions with the Executive Committee and the new leadership, and would bring the issues back to a special session of the House of Delegates on July 15.

J. David Nagel, M.D. (Baltimore County), was then recognized by the president. Dr. Nagel spoke on behalf of the Baltimore County Medical Association. He hoped Dr. Snyder would be at the Council meeting on July 15. He thought it would be a simple matter to expand that Council meeting into a House of Delegates meeting.

Dr. Snyder announced that there would be a House of Delegates meeting in Baltimore on July 15 to discuss HB 1359. Dr. Snyder said the machinery will be set up to investigate and bring back reports and discuss them.

b. Nominees for the Health Care Access and Cost Commission. Dr. Bender noted that Montgomery County Medical Society was concerned about Med Chi sending names of nominees to the Health Care Access and Cost Commission. She hoped that more than one name would be submitted. She said the Montgomery County Medical Society would like to put forth the name of Marvin Schneider, M.D., to represent the Montgomery County Medical Society.

The chairperson then asked if there were other names House of Delegates members would like to present. Donald W. Mintzer, M.D. (Baltimore City), said he would like to recommend the name of Donald H. Dembo, M.D. (Baltimore City). The chairperson noted that names were not being sent at this point. Dr. Lee-Llacer (Prince George's County) asked that Hilary T. O'Herlihy M.D. (Anne Arundel County) be included.

George S. Malouf, Sr., M.D. (Prince George's County), asked that Allan D. Jensen (Baltimore City), be added to the list. George S. Malouf, Jr., M.D. (Prince George's County), asked that Brian S. Bayly, M.D. (Prince George's County) be included.

John G. Newby, M.D. (Washington County), urged the president to send an official letter to all component societies and subspecialty societies requesting nominations on all of the entities so that a reasonable slate of individuals could be presented. He also requested that the letter ask for a brief curriculum vitae. Dr. Snyder noted that staff had already taken that into consideration.

Dr. Snyder noted that a letter will be sent to all component and specialty societies asking for names they wished to submit. The Executive Committee would select the names to be forwarded to the governor.

c. ***Specialty societies.*** Howard L. Siegel, M.D. (Baltimore County), said he was president-elect of the Maryland Society of Pathologists. He said the specialty society was asking the Executive Committee to explore ways to bring specialty societies back into Med Chi. He suggested that this could be done by communication, by attending specialty society meetings, by

telling specialty societies what their national organization is doing, and by offering services (e.g., giving specialty societies a place for their mailings, handling treasurer reports, and managing billings and accounts). Dr. Siegel thought that if Med Chi would explore this, specialty societies would know they have a single organization in which they can air their differences.

Dr. Snyder noted that specialty societies did have special representation in the House of Delegates and Council. Dr. Snyder thought that specialty societies were well represented in Med Chi at the present time. He thought it was important that everyone work together and said he would like to hear from the Committee on Specialty Societies regarding ways in which Med Chi could deal with this situation.

Michael R. Dobridge, M.D. (Montgomery County), was recognized by the chairperson. Dr. Dobridge noted that the Committee on Specialty Societies was developed so the societies would be recognized in the House of Delegates. The committee is allowed to have seven delegates in the House of Delegates. Dr. Dobridge said that the representation was deliberately established to enhance communication within the medical community. At that point, Dr. Dobridge asked if any delegates from the Committee on Specialty Societies were present.

Dr. Breschi noted that he was one of the first members of that committee. Although he found the reasons for the committee were good, he thought the problem the people on the committee now have is that there is not enough direction from Med Chi leadership—asking them what they want and vice versa. Dr. Breschi said that when he was on the committee, he did not know what Med Chi wanted or what the committee should provide.

Dr. Malouf said Med Chi used to have a meeting of the specialty society presidents and vice-presidents and the Med Chi leadership (president and chairperson of Council). Dr. Malouf thought that what he was seeing today was that the specialty society leadership wanted to be linked directly with the Med Chi leadership. Therefore, Dr. Malouf thought the new Med Chi leadership should meet with the specialty society leadership to begin a dialogue.

Daniel E. Kohn, M.D. (Baltimore City), chairperson of the Committee on Specialty Societies, stated that the committee is open and welcomes representatives from all specialty societies. Dr. Kohn noted that committee participation has been less than favorable. He would like all specialty societies to participate.

Dr. Azar asked that a staff person be put in charge of helping specialty societies have a central coordinating base. Dr. Azar thought the specialty societies should be offered those services. He thought that Med Chi should provide services to specialty societies in order to cement relationships and improve communication between specialty societies and Med Chi.

◆ *President's address*

Dr. Yosuico thanked the House of Delegates for electing him president. He stated that while doing the "president's business," he was able to travel all around the state and to other states in his role as president and AMA delegate.

In his travels, Dr. Yosuico noted a change in physician attitudes. He thinks this is a reaction to a fear of the unknown—the unknown brought about by change. Dr. Yosuico said everyone must realize that no amount of struggle or force will allow anyone to stop health system reform on the federal and state level, but by being prepared for change, one can reduce anxieties.

Dr. Yosuico then highlighted changes in medicine that have transpired over the years, including new technology and scientific breakthroughs, such as immunizations, which have done away with diseases physicians used to treat (e.g., smallpox, polio, and leprosy). Dr. Yosuico noted that the profession of medicine is itself a profession of change.

He stated that physicians are now feeling frustrated because the rules are changing again as they did in 1965 by passage of Medicare and Medicaid legislation. Many physicians worry that new rules will have a negative effect on physicians and their patients.

Physicians need to convert challenge into productive work and anxiety into action. This could be done by harnessing members' anxieties and focusing emotions—turning these factors into productive coordinated action so that physicians can meet the challenges of medical leadership in these troubled times.

Dr. Yosuico thought it was time for physicians to stop noting their differences and join the majority, enhancing the single voice of Med Chi. He further noted that change could be positive. It can stimulate growth, make a person stronger and more understanding, and thereby transform medicine for the good.

◆ *Change of office ceremonies*

Joseph Snyder, M.D., was installed as the 1993-1994 president by the outgoing president, Jose M. Yosuico, M.D. Also present were Dr. Snyder's wife Madrian and his daughter, Lori.

Dr. Snyder presented Dr. Yosuico with the past president's medallion. Dr. Yosuico then presented Dr. Snyder with the gavel, which signified the change of office.

◆ *Incoming president's remarks*

Dr. Snyder noted that he has seen many changes take place in organized medicine during his tenure as councilor, AMA delegate, and president-elect. He mentioned that health system

reform is a growing concern to physicians, and it means more change. Dr. Snyder went on to say that change should be good and encouraging because it is the future. Because Maryland has placed itself in the forefront with its health system reform legislation, a responsibility has been placed on physicians of state medical societies to be a part of the change. He said it was important for Med Chi members to work as a unit toward one goal; members should remember that nothing can happen without Med Chi involvement. Dr. Snyder believed it was important that members put their personal differences aside. He thought there was a need for increased participation by physicians in the medical society process locally, statewide, and nationally. Dr. Snyder went on to say that every Med Chi member should make it a personal goal to recruit physicians to become members of the organization. He concluded his speech by thanking the House of Delegates for allowing him to serve as president.

◆ Election of officers

The results of the election were as follows:

- ✧ *President-elect:*
  Donald H. Dembo, M.D.
- ✧ *Secretary:*
  Paul A. Stagg, M.D.
- ✧ *Treasurer:*
  Carol W. Garvey, M.D. (uncontested)
- ✧ *First vice-president:*
  Alex Azar, M.D.
- ✧ *Second vice-president:*
  J. Ramsay Farah, M.D. (uncontested)
- ✧ *Third vice-president:*
  Thomas E. Allen, M.D. (uncontested)
- ✧ *AMA delegates:*
  George S. Malouf, Sr., M.D.
  Donald T. Lewers, M.D.
- ✧ *AMA alternate delegates:*
  Louis C. Breschi, M.D.
  Reynaldo Lee-Llacer, M.D.

Each person who won and ran for a contested position gave a short speech thanking the members for their support and confidence.

◆ Adjournment

There being no further business, the meeting was adjourned at approximately 5:30 p.m.

Respectfully submitted,
SECRETARY CAROL W. GARVEY, M.D.

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Med Chi Bicentennial Celebrations

Med Chi has already begun planning celebration activities for its bicentennial in 1999. If you have ideas or suggestions, please call Margaret Burri or Vivian Smith at 410-539-0872 or 1-800-492-1056.

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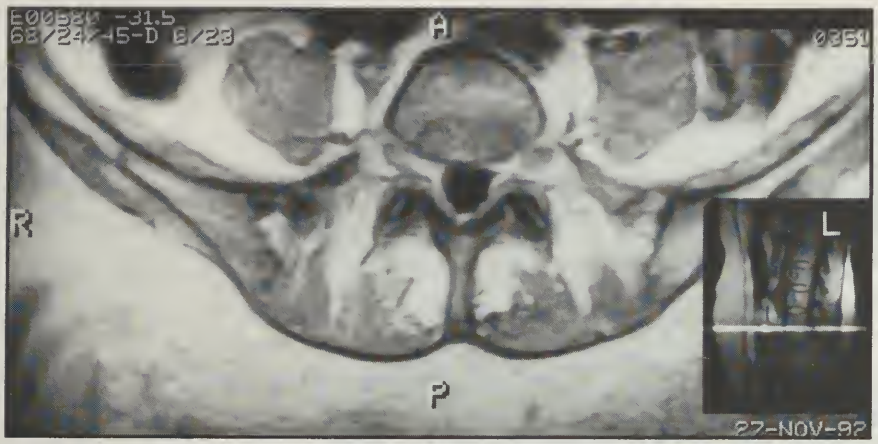
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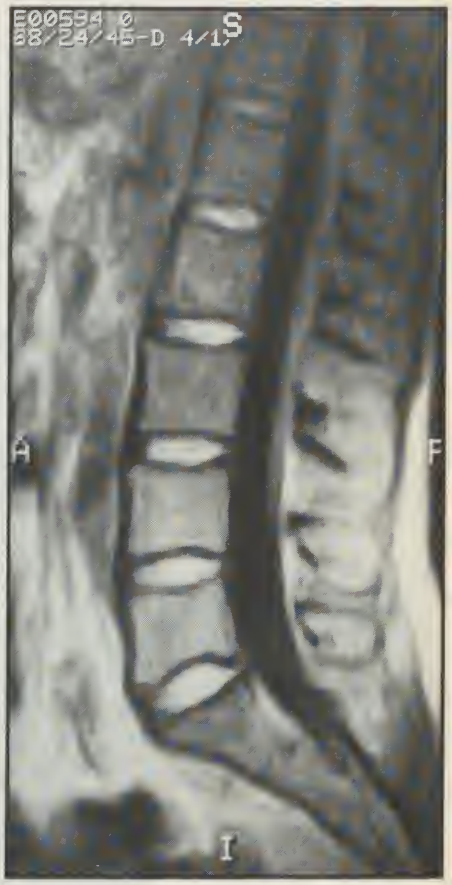
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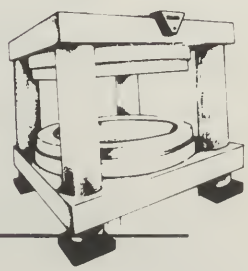
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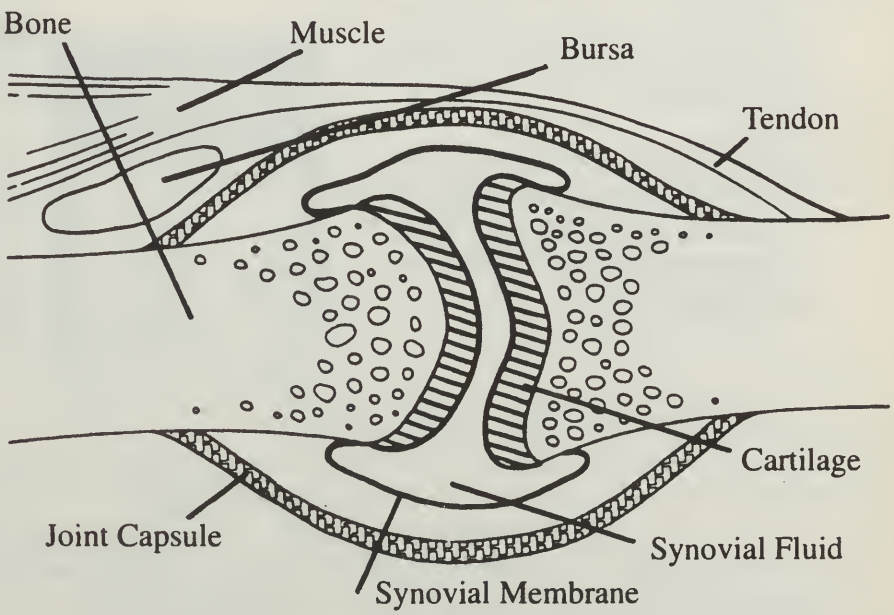
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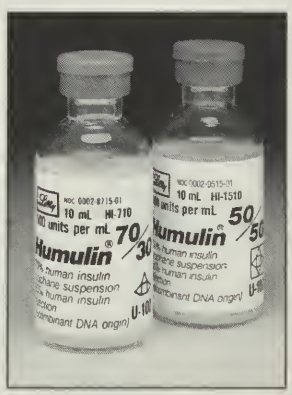
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Committee on AIDS

Mr. President and Members of the House of Delegates:

During the past year, the Committee on AIDS (acquired immunodeficiency syndrome) focused on developing a strategic plan that would define goals and objectives for the committee to strive to achieve. This strategic plan addressed human immunodeficiency virus (HIV) screening and prevention, education of the public, professional education, protection for health care workers, protection of patient confidentiality, improvement in caring for HIV-positive and AIDS patients, and legislative initiatives. Council approved the following strategic plan at its meeting of January 21, 1993;

1.0 HIV screening and prevention

1.1 Offer HIV testing in all drug rehabilitation programs, at STD [sexually transmitted disease] and public health clinics, and in secondary schools and colleges.
1.2 Continue anonymous HIV testing in a minimum of 11 public health clinics.
1.3 Report positive HIV status by unique identifier.
1.4 Report CD4 counts of <200 (if HIV+) as per state law.
1.5 Provide, through public health clinics, partner notification for HIV+ individuals upon request.
1.6 Increase number and funding of drug rehabilitation programs.
1.7 Provide needle exchange programs
1.8 Provide condom availability through drug rehabilitation, public health clinics, and school nurses.
1.9 Increase the opportunity for voluntary HIV testing through physician offices, clinics, independent laboratories, and hospitals.
1.10 Oppose mandatory testing of any groups.
1.11 Continue to explore immunity for individuals who report HIV+ individuals who willfully expose others.

2.0 Public education

2.1 Cooperate with public health departments to develop a speaker's kit, including slides.
2.2 Develop public information newspaper columns.
2.3 Improve public school AIDS awareness and education.
2.4 Encourage local Med Chi chapters to assist local school boards in developing AIDS awareness and education programs.
2.5 Review current public school programs.

3.0 Professional education

3.1 Continue to support professional education through Med Chi and other existing agencies.
3.2 Provide *Communicable Diseases Bulletin* and *Moore Newsletter* to all primary care physicians in Maryland.
3.3 Continue AIDS education segments at Med Chi annual meetings.
3.4 Establish AIDS column for *Maryland Medical Journal.*
3.5 Develop special edition of *Maryland Medical Journal.*
3.6 Support dissemination of AIDS teaching materials.

4.0 Protection of health care workers

4.1 Staff AIDS review committee for physicians who are HIV positive.
4.2 Encourage voluntary, anonymous testing of health care workers.

5.0 Protection of patient confidentiality

5.1 Protect all positive HIV tests.
5.2 Protect name of index case in partner notification cases.

6.0 Improvement of care for HIV+ and AIDS patients

6.1 Improve medical assistance compensation for HIV and AIDS.
6.2 Continue and increase number of diagnostic and education units (DEUs.)
6.3 Advocate with third-party payers for AIDS patients.
6.4 Increase number of provider members of Committee on AIDS.

7.0 Legislative issues

7.1 Establish educational forum for legislators.
7.2 Continue review of proposed legislation.

The Committee on AIDS also presented Council with a suggested educational forum format for legislators. At its meeting of January 21, 1993, Council approved of this forum during which members of the committee were to present a brief panel discussion of the following:

- What is HIV and how is it transmitted?
- What is the current status of HIV in Maryland?
- What are physician recommendations for HIV legislation?

Because the legislative session had already begun, the committee thought it was too late for the educational forum this

year, but the committee is planning to hold the forum next year.

Committee members became actively involved in the 1993 legislative session and reviewed HB 50 (Fire, Rescue, and Emergency Medical Services Personnel—Bill of Rights) and SB 119 (State Fire Marshal—Notification of Exposure to Contagious Disease or HIV). The committee recommended that Med Chi take no position on these bills.

The committee also became actively involved in the debate about the feasibility of the Department of Health and Mental Hygiene (DHMH) developing a unique identifier system. DHMH testified in Annapolis that it was unable to develop a unique identifier number having a duplication error of less than 2% and that would assure the confidentiality of the patient. Furthermore, the issue of funds to support such a system seemed problematic. It has been the committee's position that named reporting is unacceptable, and the effort to force named reporting did not pass the legislature this session.

Another activity in which the committee was involved was the development of a universal precautions poster that must be displayed in physicians' offices. The committee worked with the DHMH AIDS Administration to finalize the poster for physicians' offices.

This year, the Committee on AIDS sponsored a session at the annual meeting entitled "Case Management of the Seropositive HIV Patient." The speakers for the session included Lois Eldred, P.A., M.P.H., director of Support and Education Services, the Moore Clinic, Johns Hopkins Hospital; Eric Fine, M.D., assistant director, AIDS Help Services, DHMH; and Pamela Wilson, M.S.W., clinical case manager, Adult HIV Program, University of Maryland Medical System. The educational session was well received by the physicians who attended, and it provided a wealth of information and resources for physicians to use in their practices.

The Committee on AIDS looks forward to working on implementation of the strategic plan and educational forum for legislators in the coming year.

Committee members

Chairperson P.G. Rausch, M.D.
C. Alex Alexander, M.D.
Robert J. Ancona, M.D.
Randy S. Berger, M.D.
Stanley L. Blum, M.D.
James E. Bowes, M.D.
John C. Downs, M.D.
Andrew P. Fridberg, M.D.
John M. Henderson, M.D.
Bernard McGibbon, M.D.
Janet L. Rice, M.D.
John R. Warfield, M.D.
David Wheeler, M.D.
Jack M. Zimmerman, M.D.

Advisory members

Timothy Buckman, M.D., Ph.D.
Kathleen F. Edwards, Ph.D., R.N.
Eric Fine, M.D.
Joyce Harper, M.D.
Katharine S. Harrison, M.D.
Pamela Lipsett, M.D.

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Committee on Alcoholism and Chemical Dependency

Mr. President and Members of The House of Delegates:

The Committee on Alcoholism and Chemical Dependency continued its efforts toward raising awareness concerning the dangers of alcohol and drug abuse, including smoking. Nine meetings were held during the past year. The committee continued to gather information on tobacco consumption to help aid Med Chi efforts to reduce and eventually eliminate smoking, especially among our youth.

The committee supported legislation aimed at decreasing and discouraging the consumption of alcohol and tobacco products in Maryland. The committee also supported bills to restrict the sale of tobacco products and supported measures to restrict smoking at the new Oriole Park at Camden Yards. Members of the committee also supported the recently enacted ban on smoking in the seating area and restrooms of Oriole Park at Camden Yards and recommended that a letter congratulating the Baltimore Orioles Baseball Club on its stand for health be forwarded to President Larry Lucchino, Baltimore Orioles Baseball Club, Inc. Such a letter was approved by the Executive Committee and forwarded from President Jose M. Yosuico, M.D. to Mr. Lucchino.

In a joint effort with the Committee on Physician Rehabilitation, the Committee on Alcoholism and Chemical Dependency developed tobacco advertisement warning labels to be placed on magazines in physicians' waiting rooms. The labels were forwarded to Maryland physicians via direct mail,

the *Maryland Medical Journal,* and *Straight Forward.* The labels received wide coverage, including a press conference to introduce them; they have been well received by the medical community.

Also in concert with the Committee on Physician Rehabilitation, the committee sponsored a highly successful conference, *The Third Annual Conference on Addiction: Physician Health and Education*, which took place on November 21, 1992.

In addition, the Alcoholism and Chemical Dependency Committee reviewed and critiqued the Med Chi substance abuse education project curriculum, *Substance Abuse Education for the Primary Care Physician.* The curriculum was designed for practicing physicians to teach them how to screen, diagnose, counsel, and refer substance-abusing patients.

The committee continues to work diligently to address a wide range of concerns about substance abuse, and looks forward to cosponsoring the fourth annual conference on addiction in the fall of 1993.

As chairperson, I wish to thank Med Chi, the committee members, and our staff for their assistance and support this past year.

Committee members

Chairperson Franklin T. Evans, M.D.
Jonathan Book, M.D.
Claude R. Feinstein, M.D.
Kevin S. Ferentz, M.D.
John H. Hirschfeld, M.D.
Isadore Kaplan, M.D.
Dan H. McDougal, M.D.
Abraham Schneidmuhl, M.D.
Beatrice L. Selvin, M.D.

Advisory members

Ludwig L. Lankford
Patricia B. Miedusiewski, R.N.
Phil McKenna
W. Robert Miller
Philip P. Nolan, D.D.S.

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Ad Hoc Bicentennial Committee

Mr. President and Members of the House of Delegates:

The Ad Hoc Bicentennial Committee met twice during the 1992-1993 year. Since it is a new committee, these first two meetings focused on defining the purpose and goals of the bicentennial.

There is a strong belief that the focus of the bicentennial should be educational. It is an opportunity to remind the public that Med Chi has, for 200 years, served the public through improved health care. The committee agreed that in all programs planned for the celebration, it is important to focus on how individuals can take care of their own health, to steer away from the didactic, and to convey the complexity of medicine.

Some suggested programs include developing joint exhibits with the Maryland Science Center and the Maryland Historical Society, holding panel discussions on topics of interest to both physicians and the general public, conducting the 1999 annual meeting in Annapolis, and promoting the bicentennial through a logo and lapel pin. (The logo has been designed and the pin commissioned. The design of both is the Med Chi seal superimposed over a Maryland flag. Around the edge is inscribed, "Medical and Chirurgical Faculty of Maryland 1799-1999.")

The committee goal for the next year is to lay the groundwork for these plans. In particular, committee members will work closely with the Public Relations Committee on establishing media contacts, finding speakers, and defining themes for panels.

Committee members

Chairperson Ronald H. Fishbein, M.D.
Federico G. Arthes, M.D.
Emidio Bianco, M.D.
Milford M. Foxwell, M.D.
Carol W. Garvey, M.D.
Edward J. Kowalewski, M.D.
Henry P. Laughlin, M.D., Sc.D., Sc.S.D.
Zorayda M. Lee-Llacer, M.D.
George S. Malouf, Sr., M.D.
Hiroshi Nakazawa, M.D.
Guillermo Sanchez, M.D.
Roland T. Smoot, M.D.
Paul A. Stagg, M.D.
H. M. Zassenhaus, M.D.

Advisory members

Marc Micozzi, M.D., Ph.D.
Philip Teigen, Ph.D., M.L.S.

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Computers in Medicine Committee

Mr. President and Members of the House of Delegates:

The Computers in Medicine Committee has completed another productive year under the direction of its chairperson, Rafael C. Haciski, M.D. Meeting on a monthly basis throughout the year, the committee has stayed abreast of technological developments and continued to provide educational support for Med Chi physicians and their staffs.

The committee has several important charges, the first of which concerns education. To meet that charge, courses were offered in computer software and hardware selection, beginning with a seminar at the Med Chi semiannual meeting in Ocean City in September 1992, and concluding with the presentation at the Med Chi annual meeting in April 1993. Additional presentations were given by Dr. Haciski at various hospitals, providing the gathered physicians with guidance in office systems selection. Individual committee members have also independently counseled Med Chi physicians on various aspects of computerization and remain constantly available for such advice.

The second important committee charge concerns maintenance of the electronic bulletin board service, MedSig. This important service, which provides a means of rapid and convenient communication between members using diverse computers, continues to be available to all Med Chi physicians under the watchful eye of H. Gerald Oster, M.D. Prime features are the ability to transmit text and allow for its review and editing by the recipient and subsequent re-transmittal of corrected text to the originator of the message. All of this can be accomplished without the use of paper and on totally different and otherwise incompatible computers.

Looking to the future, physicians are becoming increasingly concerned about the menacing threats of managed care, bringing with it the need for computerized monitoring of transactions and interchange of medical information. The committee plans to be involved in the development of new systems and the implementation of available technology to facilitate such computerization and to make the situation more favorable and easier to manage for the practicing physician.

Committee members

Chairperson Rafael C. Haciski, M.D.
Charles P. Adamo, M.D.
Norman K. Bohrer, M.D.
Martin Berger, M.D.
Dino E. Flores, M.D.
Uwe G. Goehlert, M.D.
Charles A. Hargjen, M.D.
Guillermo S. Linsao, M.D.
Albert Nahum, M.D.
Avigdor I. Niv, M.D.
H. Gerald Oster, M.D.
William D. Parnes, M.D.
Michael P. Parsons, M.D.
William J. Pogoda, M.D.
Stephen J. Rockower, M.D.
Jeffrey C. Schultz, M.D.
Mark S. Seigel, M.D.
Chao-son Teng, M.D.

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Continuing Medical Education Review Committee

Mr. President and Members of the House of Delegates:

The Continuing Medical Education Review Committee (CMERC) met six times during the past year, carrying out its responsibility to monitor the 61 hospitals and organizations accredited by Med Chi to sponsor intrastate continuing medical education activities eligible for Category 1 of the American Medical Association's (AMA's) Physician's Recognition Award. Through the authority delegated by the Accreditation Council for Continuing Medical Education (ACCME) to survey and accredit institutions to sponsor their own CME activities, CMERC is responsible for providing education, guidance, and consultation to accredited institutions as they strive to provide the best possible educational activities for their physicians.

The committee's activities included

- ✦ conducting six on-site surveys;
- ✦ conducting four reverse-site surveys;
- ✦ granting initial accreditation to three institutions;
- ✦ placing one sponsor on probation for a one-year period;

- ✦ reviewing 21 interim reports;
- ✦ reaccrediting six sponsors; and
- ✦ providing nine consultative visits to sponsors.

Significant changes in CME policies and procedures occurred during the past year including the issuance, by ACCME, of new standards for commercial support of CME, the release of the Food and Drug Administration's (FDA's) long-awaited policy statement on industry-supported scientific and educational activities, and AMA's announcement of an additional choice for the Physician's Recognition Award—certificate with "Special Commendation for Self-Directed Learning." In order to keep Med Chi's accredited sponsors abreast of these changes and current interpretations of the *Essentials and Standards*, the CMERC presented a workshop titled "Demystifying the Essentials: CME Policies and Procedures" at the Med Chi annual meeting. Over 70 physicians and CME staff personnel attended the session on April 30, 1993.

The following hospitals and organizations are accredited by Med Chi:

1. American Cancer Society—Maryland Division
2. American Heart Association—Maryland Affiliate
3. American Lung Association of Maryland
4. Anne Arundel Medical Center
5. Baltimore County General Hospital
6. Baltimore County Medical Association
7. Baltimore City Medical Society
8. Bon Secours Hospital
9. Carroll County General Hospital
10. Chestnut Lodge Hospital
11. The Children's Hospital and Center for Reconstructive Surgery, Inc.
12. Church Hospital
13. Community Psychiatric Clinic, Inc.
14. Crownsville Hospital Center
15. Doctors Community Hospital
16. Dorchester General Hospital
17. Fallston General Hospital
18. Franklin Square Hospital Center
19. Frederick Memorial Hospital
20. Good Samaritan Hospital
21. Greater Laurel-Beltsville Hospital
22. Harbor Hospital Center
23. Harford Memorial Hospital
24. Holy Cross Hospital
25. Howard County General Hospital, Inc.
26. J. Lawrence Kernan Hospital, Inc.
27. Liberty Medical Center, Inc.
28. Maryland General Hospital
29. Maryland Hospital Education Institute
30. The Maryland Psychiatric Society, Inc.
31. Maryland Radiological Society
32. Maryland State Black Psychiatrists' Association
33. Medical Mutual Liability Insurance Society of Maryland
34. The Memorial Hospital and Medical Center of Cumberland, Inc.
35. Memorial Hospital of Easton, Maryland
36. Mercy Medical Center
37. Montgomery County Department of Addiction, Victim, and Mental Health Services
38. Montgomery General Hospital
39. Monumental City Medical Society
40. Office of Occupational Health Services/National Security Agency
41. The Neurology Center, P.A.
42. North Arundel Hospital
43. Peninsula Regional Medical Center
44. Potomac Ridge Treatment Center
45. Prince George's County Medical Society
46. Prince George's Hospital Center
47. Sacred Heart Hospital
48. St. Agnes Hospital
49. St. Joseph Hospital
50. Shady Grove Adventist Hospital
51. Sheppard & Enoch Pratt Hospital
52. Sinai Hospital
53. Southern Maryland Hospital, Inc.
54. Spring Grove Hospital
55. Springfield Hospital Center
56. Suburban Hospital
57. Taylor Manor Hospital
58. Union Memorial Hospital
59. University of Maryland Health Center
60. Veterans Administration Medical Center
61. Washington Adventist Hospital
62. Washington County Hospital

Committee members

Chairperson William L. Thomas, M.D.
Carlos Alarcon, M.D.
Timothy D. Baker, M.D.
James Castellano, M.D.
Irvin H. Cohen, M.D.
Worth B. Daniels, M.D.
Orlando R. Davis, M.D.
Susan Ferrand, M.D.
J. Blaine Fitzgerald, M.D.
Seymour Goldgraben, M.D.
Jawad U. Hasnain, M.D.
Carol J. Johns, M.D.
Deusdedit Jolbitado, M.D.
Henry H. Kwah, M.D.
Abdul Nayeem, M.D.
Sidney B. Seidman, M.D.

R. Kennedy Skipton
Carl A. Soderstrom, M.D.
David Solomon, M.D.
Bernard Tabatznik, M.D.

Advisory member
Jack L. Mason, Ph.D.

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Committee on Drugs

Mr. President and Members of the House of Delegates:

The Medical and Chirurgical Faculty bylaws state that the Committee on Drugs shall be "responsible for evaluating the appropriateness of prescribing controlled dangerous drugs and shall work closely with appropriate governmental authorities in controlling the abuse of controlled dangerous substances by physicians."

The committee has a specific, statutorily mandated role in the process by which physicians receive approval to prescribe amphetamines and methamphetamines. State regulations require physicians to request approval from the Division of Drug Control medical consultant for the prescribing of amphetamines. To prescribe methamphetamine, physicians must receive **prior** approval from the medical consultant. The secretary of the Department of Health and Mental Hygiene appoints the medical consultant. In 1992, as in past years, the secretary appointed the Med Chi Committee on Drugs chairperson as medical consultant.

The regulations further provide that if there is any doubt as to the validity of the diagnosis of a condition justifying the prescription of amphetamines, the documentation shall be submitted to the Med Chi Committee on Drugs by the medical consultant for that committee's review and advice. The Committee on Drugs reminds all physicians in Maryland of their responsibility to request approval from the medical consultant for the prescribing of amphetamines. Requests should be addressed to the chairperson of the Committee on Drugs at the Med Chi offices.

The committee continues to strive to maintain a balance between educating physicians about their prescribing practices and supporting discipline for those who abuse these privileges. The chairperson appreciates the continued dedication and commitment of members and staff to the education of physicians in this important aspect of their practice.

Committee members
Chairperson Ramesh K. Khurana, M.D.
Harbhajan S. Ajrawat, M.D.
Cresenciano Lopez, M.D.
George H.A. Bone, M.D.
Dante U. Monakil, M.D.
Stanley Z. Felsenberg, M.D.
Beatrice Selvin, M.D.
Nelson H. Hendler, M.D.
Patrick Sheehan, M.D.
Stephen A. Hirsch, M.D.
John R. Smith, Jr., M.D.
Richard F. Tyson, M.D.

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DR. YOSUICO (R) SWEARS IN DR. SNYDER AS THE 1993-1994 MED CHI PRESIDENT.

Committee on Emergency Medical Services

Mr. President and Members of the House of Delegates:

The Committee on Emergency Medical Services conducted four meetings during the report period. A number of issues, to include legislative bills that have a direct impact on emergency medicine, were discussed and actions taken. Because of the magnitude and impact of some issues, monitoring must be ongoing. Major areas of significance are discussed below.

Emergency medical services funding

At the late-1992 meetings, strategies were discussed regarding the governor's 1993 budget implemented by the University of Maryland; the budget initially directed a 63% budget cut to the Emergency Medical Services (EMS) system [essentially, the Maryland Institute of Emergency Medical Services Systems (MIEMSS)]. After considerable negotiation, a favorable outcome resulted in the restoration of the EMS (MIEMSS) budget to the 1992 ($6.8 million) level; $4.3 million to be raised by the state.

The Governor's Commission on EMS

The governor appointed an EMS commission to study the mission, structure, funding, and operation of EMS in Maryland. The commission was tasked to submit its recommendations to the governor by December 31, 1992; James A. D'Orta, M.D., was appointed chairperson. The proclamation announcing the establishment of the Governor's Commission on EMS detailed the commission composition. The chairperson, on behalf of the Medical and Chirurgical Faculty, testified before the commission. Commission recommendations included a major overhaul in the operation of MIEMSS. Part of the recommendations included the creation of a Board of Emergency Medical Services to administer EMS in Maryland; the creation of an EMS Advisory Council for the EMS board; the separation of the R. Adams Cowley Shock Trauma Center from the direct control of MIEMSS and placement of the function under the control of the University of Maryland Medical System Corporation; the separation of the McMathias Research Activity; and MIEMSS being targeted to report directly to the governor. HB 1222 and SB 686 (identical in text) were drafted and submitted to the 1993 legislature. The bills were amended and passed. As of this report, the legislation has been signed by the governor.

Emergency department overcrowding

Emergency department (ED) overcrowding continues to be a concern and a monitoring issue of the committee. State and the national American College of Emergency Physicians (ACEP) reports were reviewed, and individual hospital status monitoring was conducted. ED overcrowding remains a problem because of increased use by the elderly, "dumping" of nursing home patients, homeless issues, changing practice patterns by private physicians, increasing problems in society with drugs and alcohol, the increased prevalence of AIDS (acquired immunodeficiency syndrome) and violence in the community, funding problems, and an insufficient number of hospital beds during specific times thus delaying patient admission from the ED. All these factors lead to a patient back-up, a decreased level of care, and longer waiting times for patients, among other problems. Because of this, a letter was written to the Maryland Hospital Association to encourage it to alert hospitals to the growing overcrowding problems and to take steps to address preventive measures for the winter of 1993. The problems cannot be fixed easily. The overcrowding issue will continue to be addressed at future committee meetings, probably for several years.

Health Care Financing Administration audits

The committee addressed the concerns of emergency physicians being audited by the Health Care Financing Administration (HCFA). Affected emergency physicians objected to the scope and inappropriateness of the audits. Audits are being conducted in a harassing and demeaning manner. The committee recommended that Med Chi write HCFA and request the correction of the audit process.

Survey of component medical societies

The committee surveyed all component medical societies to ascertain the impact of the MIEMSS budget cuts. The survey yielded a response of almost 70%. Nearly all respondents reported that funding cuts would affect staffing, equipment purchases and maintenance, patient transport, communications, and certification and training. In view of the governor's appointment of the EMS commission, this issue was tabled for later review, if appropriate.

Legislative issues having an impact on emergency medicine

The major legislation having an impact on EMS was discussed previously under the "Governor's Commission on EMS." HB 1280 and HB 1359, health care reform bills, were passed by the legislature. As of this report, HB 1222, HB 1280, HB 1359, and health maintenance organization (HMO) legislation have been signed by the governor.

Assaults on physicians

The committee reviewed assault incidents of physicians in private offices as reported by the Baltimore City Medical Society. A checklist of security measures was prepared and accepted for publication by Med Chi to assist physicians in ensuring that adequate building and office security is in place.

Management of chemical agent incidents

The committee stayed current on the development of a training program to provide physicians, nurses, hospital administrative staff, and pre-hospital care providers the latest information on the management of chemical agent casualties. Med Chi has arranged, in conjunction with the Maryland Chapter of ACEP and the Centers for Disease Control and Prevention (CDC), to offer the program at the 1993 Med Chi annual meeting.

Other issues reviewed and discussed include

- ✦ Maryland Access to Care program
- ✦ Legislation addressing
  - ✧Drunk and Drugged Driving; Emergency Response Restitution
  - ✧Fire, Rescue, and EMS Personnel—Bill of Rights
  - ✧Medevac—Nonresidents; Reimbursement for Transportation Costs
  - ✧Vehicle Laws: Passengers on Motorcycles—Age Restriction
- ✦ Domestic violence
- ✦ DNR (do not resuscitate) orders proposed for legislation
- ✦ ED observation units
- ✦ Emergency medicine article for *Maryland Medical Journal*
- ✦ Impact of COBRA law as basis for recent attorney suits

It has been my pleasure to serve Med Chi as the chairperson of the Committee on Emergency Medical Services.

Committee members

Chairperson Peter M. Fahrney, M.D.
Sunil K. Ahuja, M.D.
Barbara J. Bach, M.D.
Lawrence F. Blob, M.D.
Randy S. Ellis, M.D.
Jeffrey L. Fillmore, M.D.
Douglas J. Floccare, M.D.
Anne Salmon-Barone, M.D.
Jeannine L. Saunders, M.D.
Michael A. Stang, M.D.
Harold Sussman, M.D.

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Finance Committee

Mr. President and Members of the House of Delegates:

During the 1992-1993 year, the Finance Committee met several times to review the 1992 interim financial statements. The 1992 audited financial statements are located in the Supplementary Reports section of this journal.

With the revisions made to SB 654, Med Chi was able to use the $50 physician licensure assessments to fund both physician rehabilitation and peer review activities beginning October 1, 1992. The rationale for this change is that peer review services all physicians in Maryland, not just Med Chi members. We think this is a positive change.

The committee met several times with staff to develop the 1993 budget for Med Chi's general fund and physician rehabilitation/peer review. The budgets were presented to Council in November 1992, according to the bylaws. Council referred the budgets to the Executive Committee since critical information was not obtainable until lobbying arrangements were finalized. The Executive Committee approved the 1993 budgets at its January 1993 meeting. The 1993 budget follow the audited financial statements in the Supplementary Reports section of this journal.

Committee members

Chairperson Paul A. Stagg, M.D.
Sheldon B. Bearman, M.D.
Albert L. Blumberg, M.D.
Joel L. Falik, M.D.
Abdolhamid Ghiladi, M.D.
Allan D. Jensen, M.D.
J. David Nagel, M.D.

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Focused Professional Education Committee

Mr. President and Members of the House of Delegates:

The Focused Professional Education Committee offers evaluation and focused medical education to physicians with defined deficits in their practices. The committee provides a resource for those physicians to improve their care of patients.

The committee receives referrals from peer review organizations, hospitals, licensing boards, and individual physicians. Referrals have also come from surrounding states, including New Jersey, Rhode Island, and West Virginia. Each evaluation results in an extensive report, focusing on the deficits in a physician's practice, assessing the physician's needs, and addressing those needs through specific educational recommendations.

In the past year, the committee has worked with Franklin Square Hospital Center to provide focused education courses in a community hospital setting. The committee has also begun work on a course in medical recordkeeping, which it will offer several times a year at Med Chi.

Committee members

Chairperson Edward J. Kowalewski, M.D.
Pablo E. Dibos, M.D.
Ronald J. Cohen, M.D.
Mesbah U. Dowla, M.D.
Kevin S. Ferentz, M.D.
Michael J. Richardson, M.D.
Elliece S. Smith, M.D.

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Committee on Hospital Medical Staffs

Mr. President and Members of the House of Delegates:

The Committee on Hospital Medical Staffs discussed numerous items of importance to the present circumstances of, and future policies involving, hospital medical staff activities. The committee submitted a resolution to the American Medical Association (AMA) Hospital Medical Staff Section (HMSS) Assembly at the December 1992 interim meeting. This resolution expressed great concern about the depletion in health insurance agency financial reserves due to ill-advised commercial investments. The resolution asked that the AMA adopt, as policy, a resolution stating that if money is going to a nonprofit entity that is supporting patients, then that money should stay for patient care or support and not be placed in for-profit ventures unless the nonprofit entity obtained permission from a state regulatory agency.

The involved reference committee at the AMA HMSS heard much testimony on the possible effects of such a policy and referred the resolution to the HMSS Governing Council for consideration and report to the section's summer 1993 assembly. After reviewing the matter, the Governing Council's conclusion was that, based on current IRS (Internal Revenue Service) requirements, federal initiatives to tighten enforcement of the internal revenue code and regulations, safe harbor rules, and other activities, the types of abuses discussed in the Maryland resolution were being addressed and no further state regulation was needed. The Governing Council's report, which was accepted by the HMSS Assembly at the annual session, also recommended that appropriate investments in for-profit subsidiaries can further legitimate health care objectives and that requiring pre-approval by a state agency could delay, or even prevent, many worthwhile projects.

Both the present and past chairpersons of the Med Chi Committee on Hospital Medical Staffs testified in support of HB 1430 at the hearing of the Maryland House Environmental Matters Committee in March 1993. This measure would have prohibited hospitals from refusing privileges to physicians, or from terminating privileges currently held by physicians, based solely on economic grounds, and would have required arbitration, under the terms of the Maryland Uniform Arbitration Act, of all disputed privilege decisions between physicians and hospitals. Unfortunately, this important bill did not survive consideration by the House Environmental Matters Committee, and thus remains as unfinished business requiring future priority as a matter of urgency.

The Committee on Hospital Medical Staffs meets regularly and welcomes suggestions and requests for consideration of all topics related to hospital medical staffs.

Committee members

Chairperson Ralph E. Longway, M.D.
Gerald Apollon, M.D.
Charles J. Arnold, M.D.
Paul Burgan, M.D.
Herman Brecher, M.D.
Randy F. Davis, M.D.
Robert J. Dawson, M.D.
Peter M. Fahrney, M.D.
Richard P. Franklin, M.D.
Lynne A. Gaynes, M.D.
Abdolhamid Ghiladi, M.D.
Michael A. Glasser, M.D.
Arthur L. Gudwin, M.D.
Surjit S. Julka, M.D.
George S. Khachan, M.D.
Louis E. Kopolow, M.D.
John N. Margolis, M.D.
Francis C. Mayle, Jr., M.D.
Frederick Miltenberger, M.D.
Hamayoun Moghbeli, M.D.
Taky E. Mourtzanakis, M.D.
Andrew Nowakowski, M.D.
Louise Y. Postman, M.D.
Barry N. Rosenbaum, M.D.
Edward L. Sherrer, M.D.
William I. Smulyan, M.D.
John B. Umhau, M.D.
James E. Vogel, M.D.

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Immunizations and Infectious Diseases Subcommittee

Mr. President and Members of the House of Delegates:

The Immunizations and Infectious Diseases Subcommittee was very active during the 1992-1993 year. Continuing its efforts to keep physicians and their office staff informed about the new Occupational Safety and Health Administration (OSHA) regulations, the subcommittee offered half-day seminars for those in physicians' offices who were going to train office personnel on the OSHA regulations. These training seminars were offered on six occasions at the Med Chi building. Because two county medical societies requested that the seminar be offered at local hospitals to accommodate the number of individuals interested in attending, the seminar was given in Talbot County and Charles County. The interest generated by this topic prompted the subcommittee to sponsor an OSHA seminar at the semiannual meeting in Ocean City in September 1992. The seminars were conducted by Robert J. Ancona, M.D., subcommittee chairperson; Diane Dwyer, M.D., chief, Center for Clinical Epidemiology, Department of Health and Mental Hygiene (DHMH) and a subcommittee member; and Roseanne M. Matricciani, R.N, J.D., Med Chi's chief operating officer.

An issue brought to the subcommittee's attention early in the year concerned the distribution of vaccine information pamphlets to adults who receive immunizations. Because adults receiving vaccines were not being provided with the pamphlets, the subcommittee supported distribution of a letter from DHMH to hospital administrators alerting them to this issue. The subcommittee recommended, and it was approved, that the information also appear in the *Maryland Medical Journal (MMJ)*.

During two subcommittee meetings, the members reviewed DHMH's immunization initiatives, and discussed a national grant to provide health care to underserved areas. The subcom-



Joseph Snyder, M.D., poses with his daughter Lee, wife Madrian, and daughter Lori at the Presidential Banquet.

mittee also discussed distribution of vaccination information to physicians' offices; the subcommittee will be pursuing this issue in the coming year.

With the passage of child wellness legislation, which became effective October 1, 1992, and was being phased in over a period of one year due to differences in annual renewal dates, subcommittee members recommended that information about coverage for these services be forwarded to the appropriate physicians. This was accomplished through a memorandum from Jose M. Yosuico, M.D., president.

Another issue addressed by the subcommittee concerned use of a system to track childhood immunizations. The Arkansas system, which tracks every child and provides up-to-date immunization information, was reviewed. DHMH is currently investigating the type of tracking system that would be beneficial for Maryland children. Discussions continue on this subject.

With the passage of HB 388, the subcommittee discussed the requirement that a universal precautions sign be posted in every physician's office. Review of the proposed sign prompted suggestions that the wording appearing at the bottom of the sign be revised. These suggestions were forwarded to the AIDS Administration.

The subcommittee also reviewed information and guidelines from the Centers on Disease Control and Prevention concerning the HIB (*Hemophilus influenzae,* type B) vaccine, pneumococcal vaccine, and HIV (human immunodeficiency syndrome) infection and expanded AIDS surveillance case definition for adolescents and adults.

The subcommittee thanks all the physicians and office staff who attended the OSHA seminars. They provided the subcommittee with helpful input and generated questions that served as a basis for many of the discussions during the seminars.

Committee members

Chairperson Robert J. Ancona, M.D.
Timothy F. Doran, M.D.
James P. Richardson, M.D.
Mathuram Santosham, M.D.
Robert E. Yim, M.D.

Advisory members

Diane Dwyer, M.D.
Margaret Rennels, M.D.

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Infant, Child, and Adolescent Health Subcommittee

Mr. President and Members of the House of Delegates:

The Infant, Child, and Adolescent Health Subcommittee was reactivated during the 1992-1993 year with eight new members. As the first order of business, the subcommittee reviewed its charge and discussed initiatives that prior sub-committee members had implemented.

With the knowledge that the subcommittee had been asked to participate in the Healthy Start Project, the subcommittee invited Lillian R. Blackmon, M.D., to discuss various aspects of this project and how the subcommittee would interface with the Healthy Start Project initiatives. Dr. Blackmon discussed several facets of the Healthy Start Program and explained the subcommittee's involvement in infant mortality reviews that would be conducted under the umbrella of the Med Chi's medical review committees. The subcommittee, working closely with the Maternal Welfare Subcommittee, will take part in reviewing medical record abstracts to address systems failures, global concerns, and educational concerns. A report will be presented to a Med Chi subcommittee with broader Healthy Start Project representation. This aspect of the project will be managed by Med Chi and will be funded by the Healthy Start Program.

Another issue discussed by the subcommittee involved the Department of Health and Mental Hygene (DHMH) survey concerning birth and death certificates. The subcommittee reviewed birth, fetal death, and induced termination of pregnancy certificates. The subcommittee recommended that information concerning the hospital of birth of an infant (if less than one year of age) and all names an infant has been known by should appear on the birth certificate. This information was forwarded to DHMH.

Issues surrounding "gray-area" children were discussed. Initiatives by the Maryland Chapter, American Academy of Pediatrics, to provide access to care for gray-area children were reviewed. The subcommittee also discussed DHMH's initiative to obtain a Health Care Financing Administration waiver in order to extend services to these children through the Medical Assistance Program. Immunization concerns and delivery of care to rural areas were also addressed. The subcommittee will follow these initiatives in the coming year.

Committee members

Chairperson Alan D. Bedrick, M.D.

Lillian R. Blackmon, M.D.
John A. Boscia, M.D.
Paul Burgan, M.D.
Carol W. Garvey, M.D.
Nelson G. Goodman, M.D.
Daniel F. Krank, M.D.

Advisory member
John Ryan, M.D.

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Legislative Committee

Mr. President and Members of the House of Delegates:

The 1993 session of the Maryland General Assembly began at a time of fundamental change in the way Med Chi addresses legislative issues. Because of this, and because of regrettably unfavorable public perceptions and attitudes toward the practice of medicine in general, as reflected in the preceeding year's election campaigns, this legislative session was a time of great risk for Med Chi and Maryland physicians, with little realistic prospect of any beneficial outcome. Nevertheless, Med Chi emerged from the 1993 session of the Maryland General Assembly with an overall record of solid success in its legislative representation of Maryland physicians.

At the beginning of the 1993 session, Dr. Martinez and Med Chi staff developed organized, democratic procedures to evaluate pending legislation in the Legislative Committee. A synopsis and analysis of each legislative item of potential Med Chi interest was submitted to the committee for review. After the committee had had a chance to evaluate each bill, the committee's findings were disseminated by means of weekly *Legislative Action* newsletters, which set forth a synopsis of each bill and the committee's action on it. The *Legislative Action* newsletter also listed a calendar of upcoming hearings before Senate and House committees, so that interested physicians could participate as witnesses.

The Legislative Committee reviewed more than 225 pieces of legislation and so was able to make Med Chi's position known and felt in Annapolis. To this end, more than 55 physicians, as well as Dr. Martinez; Angus Everton, general counsel; and Mr. Mandel, testified at committee hearings. Written testimony was submitted on more than 100 proposed bills.

For the most part, these efforts brought gratifying results. The RAP (radiologists, anesthesiologists, and pathologists) bills (HB 993 and SB 704), which would have imposed Health Services Cost Review Commission (HSCRC) regulation on hospital-based physicians, were turned aside in their respective committees. SB 824, which would have submitted all physician and nonhospital medical services to HSCRC regulation, was defeated as well. HB 909 and SB 573, which would have prohibited physical therapists from practicing as employees of physicians altogether, were similarly defeated in committee. Various items of reverse tort reform legislation supported by plaintiffs' trial lawyers, including the broadening of punitive damage liability, adoption of comparative negligence, and elevation of nonpecuniary damage caps, were similarly defeated in committee after Med Chi representatives testified against these bills.

HB 1522, which would have repealed a hard-won provision of the Health Occupations Article allowing physicians to delegate simple x-ray duties to trained office personnel, was defeated in committee primarily because of the diligent efforts of Mr. Troisi and Ms. Matricciani, despite influential support for the bill by a delegate with links to the radiology technologist community.

After the physician rally on March 18 in front of the State House, Med Chi found itself directly involved in the debate surrounding health system reform legislation. Med Chi's interactions with members of the Senate Finance Committee resulted in removal of fee cap provisions from the legislation. More important, Med Chi's legislative representatives were sought out by Delegate Casper Taylor to participate actively in creating the final product—HB 1359. Through this involvement, HB 1359 was stripped of its physician fee cap provisions, for which was substituted a payment system—applicable to all health care practitioners—that permits the market to determine the final price of health care services except under extraordinary circumstances. This bill includes provisions that encourage development of practice parameters for specific procedures, and it establishes a community standard for expert testimony in malpractice cases, which may discourage the indiscriminate use of "hired gun" expert testimony.

Med Chi representatives were also involved in the passage of legislation that will restrict the ability of health maintenance organizations (HMOs) to dictate unreasonable fee terms for physicians not under contract with them but who provide services to HMO patients, particularly in the emergency room context. Med Chi was also directly involved with the preparation and enactment of the Health Care Decision Act, strengthening and broadening the scope of the present living will law,

and clarifying the law in respect to medical powers of attorney and other advance medical directives.

In addition, Med Chi also had input into a new professional corporation law, that substantially modernizes the corporate form of professional practice. And, while Med Chi was not able to prevent enactment of the self-referral bill (HB 1280), a grandfather clause was added to the bill in the Senate Economic and Environmental Affairs (EEA) Committee that will delay the operation of this bill as it affects existing practices until March 1997, in order to permit the completion of a study to determine whether this sort of legislation is necessary at all.

Finally, through diligent efforts, the Legislative Committee was able to preserve funding for Med Chi's peer review and physician rehabilitation programs, against a strong legislative attack that would have divested Med Chi of these programs entirely, or else would have cut their funding in half, rendering it difficult to continue the programs in their present form.

There remains much to be done. Med Chi must keep close track of appointments to the new seven-member Health Care Access and Cost Commission (HCACC) created by HB 1359; it is in the vital interest of Med Chi, physicians, patients, and health care consumers that those appointed to this commission are the most enlightened and capable candidates available. It is also essential that the self-referral study to be performed under HB 1280 be carried out fairly to ascertain whether indeed there are utilization and cost containment problems in this area. Parity for mental health coverage under this bill will be a critical area. Finally, all this new legislation must be studied in-depth so that, if appropriate, new legislative activity may be proposed within a reasonable time prior to the opening of the 1994 legislative session.

House Bill 1359—Health Care and Insurance Reform

HB 1359, the Health Care and Insurance Reform Bill, evolved through a tortuous procedure in both the House of Delegates and the Senate. It initially appeared as HB 286, entitled "Health Insurance—Managed Competition." HB 286 was a complicated bill establishing a Health Insurance Purchasing Commission that would break the state down into four regional areas. Each area would have its own regional advisory board empowered to enter into contracts with insurance carriers to provide health benefit plans to persons in Maryland, with an emphasis on plans issued through employers (not limited to small employers). The Health Insurance Planning Commission was also empowered to establish a unified health care database to enable it to make the necessary cost and benefit decisions in determining the type of health insurance that would be offered by participating carriers.

About mid-February, HB 286 sank without a trace and was replaced by HB 1359, introduced by the Speaker of the House and the Economic Matters Committee. This bill would create a new subtitle in the insurance code governing health insurance; establish community rating; guarantee issue of health benefit plans; limit pre-existing condition provisions; and establish health plan portability. HB 1359, as originally enacted, also would have created a Health Care Benefit and Data Commission that would regulate insurers covered under the plan and collect data from health care providers to facilitate its decision-making process.

In these forms, as of February 15, 1993, neither HB 286 nor HB 1359 contained anything of serious concern to the medical profession. Med Chi, therefore, essentially adopted a wait-and-see attitude regarding this legislation. Med Chi was somewhat skeptical of the data collection provisions of the bill, but was also favorably inclined toward the concept of community rating, prohibition of pre-existing condition exclusions, and guaranteed issue.

A series of work group meetings were held during the latter part of February and early March in the House Economic Matters and House Environmental Matters Committee on HB 1359. Med Chi representatives attended all but one of these meetings; one meeting was missed because advance notice was not given.

Around the beginning of March, there was a fundamental change in HB 1359's orientation, and one that was generated from within the House Economic Matters and House Environmental Matters committees. The portions of the bill creating a universal health care insurance package were amended to apply only to small employer group health insurance covering employees of businesses having from 2 to 50 employees. The Health Care Benefit and Data Commission, which was to consist of 11 members including a physician and hospital representative, was removed from the bill altogether, and a Medical Care Data Review Commission was created in its place, to consist of 7 members, none of whom had to be health care providers. This commission was now empowered not only to formulate a uniform set of health insurance benefits, but also to collect detailed data on the operations of all physicians and pharmacists practicing in Maryland, and, most important, the commission was required to create a payment system setting up a fee schedule that would cap physicians' (and only physicians') fees by July 1, 1996.

Although HB 1359's provisions at this stage were mandatory as to the regulation of physician fees, the bill did not require small employers to purchase the uniform set of benefits provided under the bill's plan, nor did it require insurers to offer those benefits unless the insurers offered health coverage to small employers generally.

The fee schedule portion of HB 1359 was introduced as an amendment late in the afternoon of the last day the committee considered the bill; the amendment was incorporated into the

bill approximately 20 minutes later, without any opportunity for Med Chi or physician input.

Med Chi and other specialty society groups mobilized strong opposition to HB 1359 in this form. On the Senate side, the bill had been assigned to the Senate Finance Committee. One influential senator threatened in the press to come forward with alternative legislation that was even more offensive to physicians.

Proposed amendments were worked on under tight security. No person other than Senate Finance Committee members and staff had any information as to the provisions.

The Senate Finance Committee held hearings on HB 1359 that were heavily attended by representatives from Med Chi and various specialty societies. Shortly thereafter, a well-attended rally of physicians was held in front of the State House. This rally generated substantial publicity regarding the essentially unfair and adverse nature of HB 1359 as it applied to physicians. Med Chi, with strong assistance from some component societies, undertook a sweeping telephone campaign, which literally kept the telephones of Senators O'Reilly and Miller occupied for several days. Hundreds of physicians called their senators and delegates to complain of the provisions in HB 1359. At this time, Senator O'Reilly came forth with his proposed amendments to his own health care reform bill (SB 349), which had begun its own life as an innocuous health insurance bill, but which, as proposed to be amended by Senator O'Reilly, would also have imposed mandatory fee schedules on physicians and other health care providers in Maryland.

The proposed amendments to SB 349 would have divided it into five major parts, including (1) HMO reform; (2) a Medical Care Data Review Commission; (3) a Practice Parameters and Risk Management Protocol Commission (4) a Global Health Care Budget Commission; and (5) small employer health insurance reform. These amendments were designed, in large part, to shift a substantial body of the health insurance consumer population away from traditional health insurers to HMOs. As initially drafted, the amendments contained two potential fee control systems, both within the section described as the Global Health Care Budget Commission. This behemoth of a bill would have been extremely expensive to operate; four separate commissions were created by the bill, including one to administer the practice parameters and risk management protocols. This commission, which was to be heavily weighted with physicians, was designed to create practice parameters and risk management protocols, which, when approved by the commission, would be subject to admission into evidence as affirmative defenses in malpractice actions.

At the same time that Senator O'Reilly issued these proposed amendments to SB 349, Senators Paula Hollinger and American Joe Miedusiewski introduced a separate set of amendments to SB 349. These amendments were far less intrusive than those proposed by Senator O'Reilly; they provided for a Data Review Commission, an experimental Practice Parameter and Risk Management Protocol Commission, and health insurance reform to include community rating and pre-existing condition prohibitions.

An intense period of lobbying by Med Chi and other groups followed. Ultimately, a majority of the Senate Finance Committee members were found to be opposed to the fee schedule provisions of SB 349, and the provisions were taken out. A Health Care Access and Cost Commission was created in this bill to collect and analyze data and develop a uniform set of effective benefits to be included in a comprehensive standard health benefit plan. Data would be collected by requiring all health care providers to submit, electronically, payment claims and "any other information reasonably related to the medical care database" through certain "licensed claims clearing houses" in a standard format. These licensed claims clearing houses were to pass the claims on to the payers and maintain a central database of the information collected.

A "practice parameter and risk management protocol" section of SB 349 was synthesized from the two sets of amendments offered by Senator O'Reilly and by Senators Hollinger and Miedusiewski. This provision contained the affirmative defense language that had been included in the original amendments, and which had initially been set forth in experimental legislation, proposed by emergency physicians through their legislative representative, that would have set up this procedure initially on a voluntary basis.

A small employer health insurance reform section was included in SB 349. The section was similar in many respects to that set forth in HB 1359, except that there was no trigger provision to require contingently that the insurance reforms apply to all health insurance if a certain amount of small employer group health insurance had been sold. Furthermore, in an uncodified section of SB 349, an advisory commission was set up to study the feasibility of health care provider fee controls.

SB 349 passed the Senate with a lopsided margin in its favor, just as HB 1359 had initially passed the House almost unanimously. Both bills were returned to the House Economic Matters Committee. At this point, Delegate Casper Taylor, chairperson of the House Economic Matters Committee, called a meeting of physicians and their legislative representatives, including Med Chi's general counsel. At this meeting, Delegate Taylor expressed his belief that the House had been precipitous in requiring a fee schedule in the original HB 1359, but he also indicated that the sense of the House was that it intended to include some sort of discretionary control mechanism to be applied in the event that certain health care providers' fees were found to be outside the reasonable market range and could not be brought into line voluntarily. He

recommended a system whereby the commission collecting data (which by now had gone through a series of three or four different names) could review the collected data, and if the commission found an area of payment that was out of line, the commission could hold hearings and enact regulations to control fees only in the area where a problem had been found.

One of the four physicians present at this meeting suggested that such a system might be feasible if it also included a mechanism for discussion between the affected specialty group and the commission before any control mechanism was instituted. Delegate Taylor assented to this concept. Med Chi's general counsel asked whether such a system could be used to raise physician fees if it were found that a specialty group was being underpaid, as in the case of emergency physicians dealing with noncontracted HMOs. Delegate Taylor assented to this concept as well. It was further suggested by the general counsel that a provision for qualified state anti-trust immunity be included in the bill if any voluntary discussion of fees was to be undertaken between the commission and a private specialty society; Delegate Taylor agreed to this concept also.

During the succeeding days, more than a dozen affected interest groups submitted proposed amendments to HB 1359/ SB 349. During this period, it was unknown which of these bills would be chosen as the vehicle to carry health system and health insurance reform forward. Further, there was no word as to which of the scores of amendments would be accepted.

Ultimately, HB 1359 was chosen as the final bill. It was submitted to Conference Committee to resolve the substantial differences between the House and Senate versions. The Conference Committee consisted of Senators O'Reilly, Simpson and Young, and Delegates Taylor, Alexander, and Cummings, with Delegate Virginia Thomas participating as an observer from the House Environmental Matters Committee. The Conference Committee held a series of open meetings during the first week of April, but **no** outside participation at these hearings was permitted. Ultimately, the Conference Committee came up with a final draft. It passed the House with only token opposition; in the Senate, it passed with a majority of 44 in favor, 2 opposed.

The ultimate product is well described in the HB 1359 analysis issued by Delegate Taylor. The description of the payment system is significant:

> The commission must develop and implement a payment system by January 1, 1995. The payment system provides a *framework* for the determination of the ultimate price for health care services. *The market determines the final price of a health care service.*
>
> The payment system will be based on the following factors: The practitioner's resources (e.g., overhead, experience, expertise); the value of the service (e.g., complexity and other factors); and a conversion modifier. The ultimate price of the service will be arrived at by multiplying the numeric value of these three factors. *The conversion modifier is the key to setting the dollar value of a service.*
>
> The commission will determine the numeric value for practitioner's resources and value of the service by CPT [current procedural terminology] code. *The market (practitioners and payers) will determine the numeric value of the conversion modifier.*
>
> (Emphasis in original)

Generally speaking, the bill sets forth a small group market reform. This small group market reform will automatically become applicable to all health insurance in Maryland if one of two things happen: if 60% of the population under 65 years of age receives health care coverage through an insurer or HMO, or if the federal Employee Retirement Income Security Act is amended to allow states to control employee health benefit plans.

As a cost-containment strategy, the bill requires health insurers and HMOs to submit annual reports to the insurance commissioner. The insurance commissioner may require each carrier to file new rates if the carrier's loss ratio is below 75% or if the expense ratio exceeds 20% for commercial insurers or HMOs, or 18% for nonprofit health service plans. Basically, this is profit controls on Maryland health insurers.

There is a commission to establish practice parameters under this bill. The practice parameters that ultimately would be established would not be admissible in court for any reason. Medical malpractice reform is accomplished in this bill by changing the rule as to expert testimony on standards of care from the "national standard" rule to the "similar community" rule. As discussed in Delegate Taylor's analysis:

> In any action for damages in a medical malpractice case, the health care provider is not liable for the payment of damages unless it is established that the care given by the provider is not in accordance with the standards of practice among members of the same health care profession with similar training and experience situated in the same or similar communities.

As discussed above, the bill will create a medical database to include information on health services rendered by all health care practitioners. The bill will also adopt a standardized system for processing claims, using HCFA (Health Care Financing Administration) form 1500, which has already been designated by Maryland statute as the standard claim form. The commission will analyze data and annually publish the total variations in fees and utilization on a statewide basis and by health service area.

Because of the subject matter's complexity and the bill's broad scope, it is a rough-hewn instrument. A great deal will depend on the good faith and intellectual caliber of those picked to serve on the commission; moreover, a great deal of fine tuning can be expected during the following legislative sessions to make this bill workable. Manifestly, some deadlines for operations of the commission are going to be unworkable and will have to be extended. It will behoove Med Chi and interested physicians to scrutinize closely the appointments to, and activities of, this commission in the coming months and years.

House Bill 1260—Self-referral

HB 1280, the self-referral bill, was offered last year in the House of Delegates in a form similar to that ultimately passed

this year, as HB 1374 of the 1992 session. Med Chi officially supported HB 1374 during the 1992 session on advice of the then-legislative representative, who indicated to both the Legislative Committee and the Executive Committee of Council that the bill was essentially in harmony with the ethical position of the American Medical Association (AMA) Council on Ethical and Judicial Affairs on this issue. When Med Chi later reached a determination that HB 1374 was not altogether consistent with the AMA's ethical position, Med Chi took a position that, although it supported the ethical opinions of the AMA in this regard, it similarly would follow the AMA lead to the effect that these were ethical considerations and not the appropriate subject of legislation. In any event, when HB 1280 was proposed and submitted in the 1993 session, Med Chi opposed it.

HB 1280, like last year's HB 1374, was introduced by Delegate Ronald Guns, chairperson of the House Environmental Matters Committee, along with other members of that committee. Because of this, there was a bias in favor of the bill in that committee. Nevertheless, the bill was held up in committee until mid-March when the chairperson was finally able to get enough votes to pass it out of committee.

When the bill was passed by the House, it included uncodified language holding that the anti-self-referral provisions of the bill would not apply to "a neurology group practice that contains three or more full-time radiologists who are partners in a group practice with neurologists which was in existence on or before December 30, 1988, provided that the neurology group practice does not expand its facilities beyond the number of locations in existence in the state on January 1, 1993," or to "a health care practitioner who has a beneficial interest in a cardiac rehabilitation facility who entered into a written affiliation agreement for that facility on or before December 30, 1988,. . ." with certain further provisos.

These two uncodified exceptions to the operation of the statute were stricken almost immediately from the bill when it reached the Senate EEA Committee; moreover, the EEA Committee introduced language requiring direct supervision in the event that a health care practitioner with a beneficial interest in a health care entity referred a patient to that health care entity for health care services or tests, if the services or tests were personally performed by or under the direct supervision of the referring health care practitioner.

The Senate EEA Committee added two amendments to the bill that would delay its impact and could potentially generate grounds for repeal. First, the committee added an amendment that would delay implementation for three years as to facilities and practices currently in existence. Since the House bill as originally drafted contained a one-year's grace period for facilities to divest themselves of instruments and property that could not be used under the bill's self-referral prohibitions, this granted a total of four years of divestiture time.

Moreover, a second uncodified section of the bill provided that the Institute for Governmental Service and the William Donald Schaefer Center for Public Policy should conduct jointly a study evaluating the extent to which Maryland health care practitioners have beneficial interests in, or compensation arrangements with, health care entities to which they refer patients. This study is also to compare the frequency of referral and the cost of services by practitioners who refer patients or entities in which they have beneficial interests or in which they have compensation arrangements with the frequency of referral and the cost of services by practitioners who do not have beneficial interests in or compensation arrangements with the entities to which they refer patients. Presumably, if this study shows that self-referral is not a serious utilization or cost problem, the more onerous provisions of the bill could be repealed.

The bill made its way back to the House Environmental Matters Committee, from which it was sent to Conference Committee as well. The three-year grandfather provision was deleted and redrafted so that the bill would not take effect for the purpose of requiring divestiture of existing property and modification of existing practices until March 1, 1997. Meanwhile, the study provisions were left intact.

The bill itself is a clumsy piece of legislation. Although it generally requires that health care practitioners may not directly or indirectly refer patients to a health care entity in which the health care practitioners or their immediate family own a beneficial interest, or with which there is a compensation arrangement, and although it forbids billing under circumstances where such a referral is made, there are so many exceptions to this statute that its practical effect may be less significant. The provisions of the law, for example, do not apply to

- health care practitioners when treating HMO members if the health care practitioners do not have a beneficial interest in the health care entity;
- health care practitioners who refer patients to other health care practitioners in the same group practice as the referring health care practitioners;
- a health care practitioner with a beneficial interest in a health care entity who refers a patient to that entity for health care services or tests, if the services or tests are personally performed by him or her, or under his or her direct supervision (and direct supervision, under the law, simply means physical presence on the premises where the health care services or tests are performed and availability for consultation within the treatment area);
- referral of in-office ancillary services or tests (not

including magnetic resonance imaging, radiation therapy or computed tomography services) that are personally furnished by health care practitioners in the same group practice as the referring practitioner or by individuals employed or personally supervised by the qualified referring health care practitioner, provided in the same building where a health care practitioner in the same group practice furnishes services, and billed by the group practice;

- a health care practitioner who, upon determination of the secretary of the Department of Health and Mental Hygiene (DHMH) and the Health Resources Planning Commission, is determined to provide a health care service needed "to ensure appropriate access for the community to services provided at the health care entity";
- a health care practitioner employed or affiliated with a hospital who refers a patient to a health care entity owned or controlled by the hospital, if the practitioner does not have a direct beneficial interest in it;
- a health care practitioner who has a beneficial interest in a health care entity owned or controlled by a hospital if the practitioner provides services to the patient pursuant to a referral by a health care practitioner who does not have a beneficial interest, or the health care practitioner refers a patient to the facility and personally performs or supervises that procedure; or
- a health care practitioner with a beneficial interest or compensation arrangement with a hospital or related institution if the beneficial interest was held on January 1, 1993, and thereafter the beneficial interest or compensation arrangement does not increase.

There is a requirement that health care practitioners providing exempt services must still post the legally required self-referral notice that presently exists in the law; failure to post this notice is now a misdemeanor. Moreover, there are several lengthy provisions that expressly prohibit insurers from paying claims based on prohibited self-referred services.

House Bill 462 and Senate Bill 701/House Bill 1203—HMO-related legislation

The Maryland General Assembly enacted important legislation restricting the power of HMOs to "lowball" noncontracting physicians, particularly in an emergency room context, who render care to the HMO's patients. HB 462 provides that a HMO must pay a noncontracting physician at the rate billed or at the usual, customary, and reasonable rate. In calculating the usual, customary, and reasonable rate, however, the HMO may not use Medicare, Medicaid, or Workers' Compensation payments (except for services rendered to Medical Assistance recipients) as part of any methodology used to determine a payment at the usual, customary, and reasonable rate. Furthermore, "on request of the health care provider [the HMO] shall disclose the methodology used to determine the amount of payment." This disclosure requirement can be used by the physician to enforce appropriate usual, customary, and reasonable payments by HMOs through the insurance division, the court system, or the Health Care Access and Data Commission, after the latter is up and running under HB 1359.

SB 701 and HB 1203 dealt with the definition of an emergency in an HMO context. SB 701 provided that

> Emergency services means those health care services that are provided in a hospital emergency facility after the sudden onset of a medical condition that manifests itself by symptoms of sufficient severity, including severe pain, that the absence of immediate medical attention could reasonably be expected by a prudent layperson, who possesses an average knowledge of health and medicine, to result in
>
> - placing the patient's health in serious jeopardy;
> - serious impairment to bodily functions; or
> - serious disfunction of any bodily organ or part.

By contrast, HB 1203 defined emergency services as follows:

> Emergency services means those health care services that are provided in a hospital emergency facility after the sudden onset of a medical condition that manifests itself by acute symptoms of sufficient severity, including severe pain, that the absence of immediate medical attention could reasonably be expected to result in
>
> - placing the patient's health in serious jeopardy;
> - serious impairment to bodily functions; or
> - serious dysfunction of any bodily organ or part.

SB 701 was designed to ensure that whether an emergency exists is to be determined from a layperson's perspective, while under HB 1203, the question of whose judgment is to be applied is left open. In fact, section 3 of HB 1203 expressly stated: "In enacting the definition of 'emergency services' in section 2 of this Act without reference to the reasonable expectation of a 'prudent layperson, who possesses an average knowledge of health and medicine,' the Maryland General Assembly intended to conform the standard to the language of Public Law 99-272, April 7, 1986."

Both statutes were otherwise essentially identical. In addition to the language previously quoted, both statutes required HMOs to develop and provide specific information to all HMO subscribers and enrollees that clearly describes the procedures to be followed for emergency services, including the appropriate use of hospital emergency rooms; the appropriate use, location, and hours of operation of urgent care facilities operated by the HMO; and the potential responsibility of subscribers and enrollees for payment for emergency services or nonemergency services rendered in the hospital emergency facility where the medical condition is determined not to be an emergency. Both statutes also provide that an emergency facility may indeed collect from a subscriber or enrollee for these services in the event that they are determined not to be an emergency. This language, of course, relates to the balance

billing prohibition in section 19-710(o) of the existing HMO law under these circumstances.

Ultimately, due in large part to the efforts of Med Chi's legislative representative, Mr. Mandel, Governor Schaefer signed SB 701. That version is now the law of this state.

House Bill 993/Senate Bill 704 and Senate Bill 824—RAP bills

RAP bills were introduced in the House and Senate. These bills were defeated in committee after vigorous and organized opposition from Med Chi and its physicians. HB 993 and SB 704 were identical; they would have put hospital-based radiologists, anesthesiologists, pathologists, and emergency physicians under the regulatory control of the state's HSCRC. SB 824 went much further, and would have put all physicians and nonhospital medical services under HSCRC control. Moreover, the commission was required under this bill to "develop a statewide fee schedule for physician, diagnostic, laboratory, and nonhospital ambulatory care services." This fee schedule was to be developed after study of the Medicare resource-based relative value scale (RBRVS) with "necessary adjustments for state costs." These provisions were to have been in place by January 1, 1995, under SB 824, although an interim schedule would have been developed by October 1, 1994.

House Bill 232/Senate Bill 371—Physician rehabilitation and peer review

As originally sponsored, SB 371 was designed to strip from Med Chi the physician rehabilitation and peer review programs that currently exist and are funded by a license surcharge of $50 per physician. Med Chi mounted a strong campaign in opposition to this bill. The bill was amended to remove the offensive provisions and to restore these services to Med Chi. The bill did provide for more extensive budgetary review of the programs by DHMH through the Board of Physician Quality Assurance (BPQA); Med Chi naturally took no opposition to this scrutiny.

Having turned aside this challenge, the Legislative Committee was dismayed to learn that a similar amendment had been introduced to a previously innocuous bill, HB 232, the Departmental Corrective Bill for the BPQA. Even worse, while HB 232 stripped these provisions from Med Chi, it also diminished the amount of assessment for their operations from $50 to $25. These amendments would essentially have killed the programs, since an assessment of $25 per physician would be insufficient to support the programs. Fortunately, in the Senate EEA Committee, HB 232 was made to correspond with SB 371, also providing for the unobjectionable budgetary scrutiny contained in SB 371.

HB 232 contains other useful provisions. One specifically helpful item is that the Health Claims Arbitration Office (HCAO) no longer is required to report every malpractice claim filed against a physician in this state to the BPQA. Now, the HCAO is required to report such a claim only after "a certificate of a qualified expert is filed in accordance with [the Health Care Malpractice Claims Act]." This change will lighten the labor of the BPQA substantially, as it is understood that a substantial number of meritless claims filed with HCAO are dismissed because the plaintiff fails to file a certificate of merit. Under the new law, the BPQA will not have to investigate fruitlessly these claims. Both bills were enacted on the last day of the session.

Senate Bill 664/House Bill 1243—The Health Care Decision Act/Advance Medical Directive Act

The Maryland General Assembly devoted substantial attention to substitute health care decision making in situations involving patients in terminal conditions, persistent vegetative states, or end-stage conditions, who are unable, through extreme disability, to make these decisions themselves. These two bills, which ultimately were amended to conform with each other, substantially tightened the living will process, and further codified processes for substitute decision making in the context of medical powers of attorney, guardianship proceedings, and surrogate decision making.

Med Chi, through the good efforts of the Committee on Professional Ethics and Dr. Louis Breschi especially, was involved in the creation and passage of this legislation. Dr. Breschi and Med Chi's general counsel had an opportunity to prepare and submit approximately half a dozen amendments to the original advance medical directives and health care decision-making bills that were adopted by the House and Senate. Dr. Breschi and the general counsel worked particularly closely with Professor Diane Hoffman of the University of Maryland School of Law, and Judge John F. Fader II in the preparation of these amendments. Both Dr. Breschi and the general counsel testified orally and in writing before the committees that ultimately submitted favorable reports on these bills. Both bills made it out of their respective houses at the end of the session.

House Bill 389—Task Force to Study Health Care Professional–Client Sexual Exploitation

Med Chi had an opportunity to discuss HB 389 with its sponsors, through Delegate Teitelbaum, before the session's beginning. Med Chi supported this bill, which would create a task force to develop comprehensive strategies for preventing and reducing the incidence of sexual exploitation of clients by health professionals. Med Chi recognized early that this bill's approach was primarily educational in nature, and the bill's goal—to prevent health care provider–patient sexual encounters—is a goal Med Chi has supported consistently over the years. This particular bill sets up no punitive scheme or additional disciplinary provisions in this area, and is oriented

to all health professions. If there is a shortcoming in the bill, it is that it does not address sexual misadventures of nonhealth professionals, such as those in the legal profession; nevertheless, it is reasonable to anticipate that if the task force accomplishes anything positive, its work can be duplicated in other professional areas.

Senate Bill 176/House Bill 1297—Corporation law

SB 176 and HB 1297, both of which were enacted, substantially redraft Maryland's professional corporation law, greatly increasing the usefulness of this type of practice in Maryland. Among other things, the bills make it easier to transfer professional corporations' stock. They also make it much easier for such corporations to practice across professional and geographic boundaries.

There was one serious problem with these bills as first introduced. Both bills had inadvertently been drafted to provide that "a licensing unit shall direct the department to suspend or revoke the articles of incorporation of a professional corporation if. . . the professional corporation violates any applicable rule or regulation adopted by the licensing unit regulating a profession named in the professional corporation's articles of incorporation. . . ." This provision would have required the suspension or revocation of the articles of incorporation of any professional corporation if a member of it had violated even the most trivial rule or regulation of his or her licensing unit. Upon recommendation of Med Chi's general counsel in written and oral testimony, this provision was amended to provide that a licensing unit "may" direct suspension or revocation under these circumstances. Substitution of this discretionary language for the earlier mandatory language gives each licensing unit the power to suspend or revoke for serious infractions, but also gives it the power to forgive relatively trivial infractions.

Reverse tort reform legislation

A number of troublesome pieces of legislation were introduced by persons representing the interests of plaintiffs' attorneys. These provisions could have resulted, if enacted, in a substantial increase in malpractice insurance costs. Specifically, SB 266/HB 1094 would have substituted a **comparative** negligence standard in litigation for the existing **contributory** negligence standard. A plaintiff would have been able to recover damages in a malpractice action against his or her physician even if the plaintiff were contributorily negligent, if the contributory negligence of the plaintiff was determined to be outweighed by the combined negligence of the defendants in the eyes of a jury. Med Chi testified orally and in writing in opposition to these bills in both the House Judiciary Committee and the Senate Judicial Proceedings Committee; both bills were reported unfavorably upon in the Senate Judicial Proceedings Committee.

Several pieces of legislation, including SB 845, HB 1283, and HB 1303, were designed to raise the limits of the noneconomic damage cap in personal injury actions. Again, Med Chi, through its general counsel, testified orally and in writing in opposition to this legislation in the House Judiciary Committee and the Senate Judicial Proceedings Committee; the legislation did not make it out of committee.

Finally, an attempt was made in the Senate Judicial Proceedings Committee to introduce a bill to substantially expand the scope of punitive damage liability in Maryland, in SB 727. Med Chi opposed this bill also, and it was defeated in committee.

There was one setback in the tort reform area. The Maryland Court of Appeals, during the latter part of the legislative session, ruled that the presently existing noneconomic damage caps do not apply to wrongful death actions. The Medical Mutual Liability Insurance Society of Maryland (Med Mutual), with Med Chi support, sought introduction of a bill to correct this problem; Senator Walter Baker did introduce SB 917 to reimpose this cap. Unfortunately, while the bill was still in the Senate Judicial Proceedings Committee, Senator Baker apparently came to the opinion that it would not survive the House Judiciary Committee this year, so he withdrew it and submitted the matter for summer study. Undoubtedly, similar legislation will be introduced next year. It is the Legislative Committee's intention to actively support it.

House Bill 909/Senate Bill 573—Physical therapists

Physical therapy interests arranged for the introduction of HB 909 and SB 573, which would have essentially forbidden physicians to employ physical therapists in their practices. Med Chi's physiatrist members fiercely opposed these bills, and Med Chi supported these members in their opposition to these bills; both bills ultimately failed to make it out of committee.

House Bill 1522—Office x-rays

HB 1522, was introduced relatively late by Delegates Bishop and Pitkin. Its pupose was to repeal section 14-306 of the Health Occupations Article, *Maryland Code.*

Section 14-306 had been enacted with support last year. The section exempts from the certification requirements of the medical practice act certain office staff who perform simple x-ray duties without a license when those duties do not include a specific list of sophisticated procedures, when the individual is not employed primarily to perform these duties, and when the individual has undertaken training, approved by the Maryland Radiological Society, in performing these procedures.

Because of administrative difficulties in setting up the training programs required under section 14-306, they were

not (and are not yet) in existence, so the BPQA was required to grant several grace-period extensions during which office staff could perform these x-ray procedures without the statutorily mandated training.

Medical radiation technologists' interests saw an opportunity to repeal section 14-306 during this delay, so that they could secure for themselves the exclusive right to perform these office x-ray duties themselves. Enactment of HB 1522 would have worked a hardship on physicians and their patients covered by Section 14-306. Med Chi promptly took a position of opposition to this legislation.

There is no question that HB 1522 would have been enacted, and section 14-306 would thereby have been repealed, but for the diligent efforts of Mr. Troisi and Ms. Matricciani. Work sessions were held in the House Environmental Matters Committee, personally attended by Chairperson Ronald A. Guns. At these meetings, certain representatives of the medical radiation technologists attempted to present a thoroughly distorted picture of why the required courses had not been instituted. It was charged that the reason for this delay was Med Chi inaction. Through the presentation of documentary evidence put together by Ms. Matricciani, and through the testimony of Mr. Troisi before this work group, the chairperson realized that the delay in implementing this program was through no fault of Med Chi, and that HB 1522 was not an appropriate response to the problem. As a consequence, one more piece of legislation targeted against the practice of physicians was defeated.



Dr. Paul A. Stagg addresses annual meeting participants.

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Vice-Chairperson Hilary T. O'Herlihy, M.D.
Vice-Chairperson J. Richard Lilly, M.D.

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Maryland Dermatologic Society
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Maurice B. Furlong, M.D.
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Howard L. Siegel, M.D.
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Maryland Society of Physical Medicine and Rehabilitation
Mehrad Massumi, M.D.
Martin Z. Kanner, M.D.

John Staige Davis Society of Plastic Surgeons of Maryland
Robert J. Spence, M.D.
George Thomas Grace, M.D.
National Capital Society of Plastic Surgeons
Mark E. Richards, M.D.
Maryland Psychiatric Society, Inc.
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Maryland Urological Society
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Auxiliary
Susan Sherwood

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Library and History Committee

Mr. President and Members of the House of Delegates:

The Library and History Committee met six times during the 1992-1993 association year. The committee continued its focus on the bicentennial history of medicine in Maryland and collections care and management, and took steps to increase the library's visibility and services to physicians.

Med Chi signed a contract with Jane Eliot Sewell, Ph.D., to research and write a history of medicine in Maryland for the Med Chi bicentennial in 1999. Dr. Sewell, a graduate of the Institute for the History of Medicine at the Johns Hopkins University, has submitted an outline of the proposed volume. It was reviewed favorably by the editorial subcommittee of the Library and History Committee.

Because the bicentennial has focused attention on the importance of preserving and interpreting our historical materials, steps have been taken in that direction. The historian/administrator, Margaret Burri, labeled the portraits on display at the Med Chi building. The volunteer physician cataloging project was revived with a focus on accessioning and cataloging the medical instruments collection. Committee members also volunteered to screen potential rare book donations and to help in identifying donors of significant collections. Finally, two advisory members were added to the committee. Their expertise in collections management and local history make them valuable additions.

The committee did not neglect the current collections. The historian/administrator submitted a draft collection development policy for the committee's comments. As a result, members will review holdings in their medical specialty area and make recommendations to staff regarding strengthening holdings.

The committee, recognizing the importance of increasing the library's services to physician members, supported the Information Services librarian's (Stephen Jones) Grateful Med training course. This workshop introduced physicians to the world of on-line literature searching.

In an effort to increase the library's visibility, the committee approved the loan of Rembrandt Peale's portrait of Horace Hayden to the National Portrait Gallery for a Peale retrospective. Committee members also agreed to write articles appropriate for the "From the Med Chi Collections" section (formerly the "Library Page") in the *MMJ*.

For the upcoming year, the committee plans to continue monitoring the progress of the bicentennial volume, sponsor a session at the semiannual and annual meetings, and begin to plan a dedicated issue of *MMJ* focusing on the history of medicine in Maryland.

Committee members
Chairperson Ronald H. Fishbein, M.D.
Samuel J. Abrams, M.D.
Victor E. Albites, M.D.
Milford M. Foxwell, M.D.
Stanford M. Goldman, M.D.
Michael L. Levin, M.D.
Nancy T. Nichols, M.D.
Henry B. Wilson, M.D.
Theodore E. Woodward, M.D.

Advisory members
Richard Flint, M.A.
Ann Steele, M.A.

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Committee on Long-Term Care and Geriatrics

Mr. President and Members of the House of Delegates:

The Committee on Long-Term Care and Geriatrics met four times during the 1992-1993 year and was involved in a number of projects. The committee continued its effort to survey nursing home medical directors regarding medical quality assurance guidelines in long-term care institutions in Maryland. Data analysis of the survey should begin this summer. The results of the survey will be submitted to the *Maryland Medical Journal.*

The committee also continued to collect and edit articles for a dedicated issue of the *Maryland Medical Journal* on geriatric medicine. The articles should be submitted to the *MMJ* Editorial Board by the fall.

At the request of George Taler, M.D., chairperson, the committee reviewed a draft legislative bill addressing advance directives. Though the bill was generally well received by the legislature, it will undergo further review and drafting and be resubmitted to the legislature in 1994. The committee will follow the progress of the bill through the legislative process.

In cooperation with the American Medical Association, the committee sponsored the program, "Medical Management in Home Care," during the semiannual meeting in Ocean City and the annual meeting in College Park. The committee, in conjunction with the Prince George's County Medical Society, also sponsored "Preventive Health Care for the Elderly Patient" at the 1993 annual meeting. Both programs were deemed successful.

Committee members

Chairperson George Taler, M.D.
Allan H. Macht, M.D.
Roland V. Goco, M.D.
Jules I. Cahan, M.D.
Seymour Goldgraben, M.D.
John F. Hartman, M.D.
Herbert J. Levickas, M.D.
Donald W. Mintzer, M.D.
Ruben Reider, M.D.
Paul S. Rhodes, M.D.
Joseph Shear, M.D.
Gordon M. Smith, M.D.
John R. Smith, Jr., M.D.
Joseph W. Zebley III, M.D.

Advisory member

Lois Leonard, M.D.

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Committee on Managed Care and Third-Party Liaison

Mr. President and Members of the House of Delegates:

The Committee on Managed Care and Third-Party Liaison began its year by reviewing and discussing an array of managed care problems and initiatives. One of the first initiatives undertaken by the former chairperson, Donald H. Dembo, M.D., concerned launching an effort to discuss and resolve health maintenance organization (HMO) issues at the committee level by working through the HMO association. An HMO subcommittee was formed to meet with representatives of the HMO association. At that meeting, HMO payment to nonparticipating physicians and payment for emergency services were considered. It was thought that more meetings would be beneficial and might prevent confrontation in Annapolis.

The former chairperson also addressed numerous inquiries from physicians concerning InforMed. After extensive discussion, the committee approved for publication an informational letter to be written by the president. This letter appeared in the *Maryland Medical Journal (MMJ).*

The committee was asked to assist in addressing pediatric orthopaedic surgeons' concerns regarding reimbursement for specialized procedures. The committee addressed this issue directly with the medical director of Blue Cross and Blue Shield of Maryland (BCBSM), and the surgeons were able to pursue the issue with BCBSM.

It was brought to the committee's attention that there was a reimbursement problem associated with BCBSM's policy on office visits and joint injections. Notifying BCBSM of this problem resulted in a policy change that became effective August 1, 1992. It resulted in BCBSM paying for office visits and joint injections on the same day. Notification of this change appeared in the July 1992 issue of BCBSM's *Provider Journal.*

A coverage change for Swan-Ganz catheter insertion under the General Motors Plan with BCBSM was referred to the committee. Investigation revealed that BCBSM had entered into a different arrangement with General Motors; BCBSM no longer reimbursed separately for the insertion but included it in the anesthesia time. Participating providers were not allowed to bill patients separately for the insertion. Information clarifying this issue was sent to providers who inquired about the change along with an explanation by the carrier that contractual changes affecting patient care coverage appear in the *Provider Journal.*

Uniformity of electronic claims systems was discussed. Information concerning the federal initiative with the private health insurance industry to reach an agreement on computer standards that would allow insurers to use a single claim format, reduce administrative burdens, and produce a substantial savings was published in the *MMJ.*

Unpaid claims by Medicare for transcarinal needle aspirates performed concurrently with bronchoscopic examinations were discussed with the BCBSM Medicare medical director. The medical director resolved the problem and got the claims paid.

The committee reviewed the evaluation and management data analysis provided by BCBSM's Medicare Division. Maryland codes exceeding national and crosswalk data were discussed. It was noted that subsequent hospital visits have been targeted for educational intervention.

The honoring of direct payment authorizations appeared to be a problem for some insurers. A response from the Insurance Division, Department of Licensing and Regulation, revealed that an insurer having knowledge of such an assignment cannot discharge its obligation to the assignee by payment to any other party. Therefore, this matter was clarified for providers raising the issue.

BCBSM's Medicare Division divided cardiac catheterization and coronary angiography into two components—procedural and x-ray interpretation. Maryland was instructed to pay a global fee, and the payment has been low. The problem is being addressed by the Health Care Financing Administration (HCFA). Maryland does not have any freestanding cardiac catheterization laboratories.

At one committee meeting, Stephan L. Werner, M.D., presented information about a new association of health care providers formed to address managed care issues. Dr. Werner informed committee members that the association's focus was extremely narrow and that the association will address only one or two issues at a time.

Because of numerous inquiries concerning the Workers' Compensation Commission (WCC), Neil Robinson, M.D., WCC medical examiner, was invited to a meeting to provide an overview of WCC. Dr. Robinson was informative and helpful. He offered to write an article for the *MMJ.* This article appeared in the May *MMJ* along with a questionaire concerning WCC problems. This coming year, the committee will be compiling the survey information to assess problems and will funnel this information back to WCC. The committee also sent representatives to the Medical Fee Advisory Committee meeting to provide input for the WCC fee schedule.

Crossover claims from Medicare to Medicaid caused a continuous problem for Med Chi members. Investigation revealed that a tape had not been transferred from Medicare to Medicaid. Locating and transfering the tape resolved the problem with a large number of claims, and Med Chi members received payment. Additional problems resulted in further investigation and referral of the issue to the Liaison Committee with the Medical Assistance Program, which was able to provide the membership with a temporary resolution to the problem.

Concerns were raised about Med Chi's representation on the Maryland Alliance for Health Care. The committee expressed these concerns to leadership, and adjustments were made in representation. The committee supported Med Chi's continued involvement in the alliance.

A change in payment for lithotripsy services by M.D.IPA was reviewed, and accessibility of services on an emergent basis versus a nonemergent basis was clarified. Information on this issue was forwarded to providers who raised the concern.

Another issue concerning M.D.IPA was the disallowing of claims retroactively. The committee asked the M.D.IPA, medical director to look into the matter. The medical director was able to correct the problem experienced by Med Chi members.

The committee was active during the past year addressing concerns and issues raised by the membership. The committee thanks all members who made the committee aware of managed care problems and concerns, and thanks the committee's medical director members who provided information and assistance on many issues.

Committee members

Chairperson Benjamin Avrunin, M.D.
Vice-Chairperson Joseph W. Berkow, M.D.
Former Chairperson Donald H. Dembo, M.D.
Sunil K. Ahuja, M.D.
Eric R. Baugh, M.D., M.D. IPA medical director
Stanley Z. Felsenberg, M.D.
Jay Gerstenblith, M.D.
Howard J. Hoffberg, M.D.
Perry Hookman, M.D.
Lewis A. Kellert, M.D.
Robert W. Macht, M.D.
Jose Martinez, M.D.
David C. Moses, M.D.

Susan W. Owens, M.D.
Selvin Passen, M.D.
Lawrence D. Pinkner, M.D.
Ruben Reider, M.D.
Henry S. Sabatier, M.D.
Patricia A. Savadel, M.D.
Alan Z. Steinberg, M.D.
Stephan L. Werner, M.D.

Advisory members

Barry Gold, M.D., BCBSM Medicare medical director

Arthur T. Keefe, Jr., M.D., BCBSM vice-president and corporate medical director

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The *Maryland Medical Journal* Editorial Board

Mr. President and Members of the House of Delegates:

This report covers calendar year 1992 (Volume 41). Throughout this period, the Editorial Board of the *Maryland Medical Journal* encouraged the submission of original research, case studies, review articles, medical history, and diagnostic and therapeutic updates, as well as commentaries and letters to the editor on all subjects of interest to Maryland physicians.

Following tradition, the January issue included the 1992 legislative directory; the May issue featured the 1992-1993 Med Chi president, Jose Yosuico, M.D.; and the September issue contained the annual committee reports. Due to publishing delays, the December issue incorporated the 1993 legislative directory.

John M. Dennis, M.D., dean of the University of Maryland School of Medicine from 1973 to 1990, and Richard S. Ross, M.D., dean of the Johns Hopkins University School of Medicine from 1975 to 1990, were profiled in the June and October issues, respectively. The July issue also honored Dr. Dennis' illustrious career by focusing on research being conducted at the University of Maryland School of Medicine.

George S. Malouf, Sr., M.D., the 1991 recipient of the American Medical Association's (AMA's) Dr. Benjamin Rush Award, was highlighted in the February issue. The April issue, which was coordinated by the Physician Rehabilitation Committee, addressed the success of long-term physician recovery, as well as intervention and rehabilitation. The August issue was a special edition detailing the history of the origin of the American Academy of Psychoanalysis.

Six new departments were established in 1992. Coordinated by the Maryland Radiological Society, "Imaging Case of the Month" was first featured in March, with Edgar C. Fearnow, M.D., as editor of the department. In May, the *MMJ* introduced "Clinicopathologic Conferences at Johns Hopkins," with Belur S. Bhagavan, M.D., serving as editor. "A Look Back," which consists of reprints of *MMJ* articles from 25 and 40 years ago, was initiated in October. "When the Doctor is Out," a column focusing on Med Chi physicians with unusual hobbies or additional occupations, first appeared in November. Also in November, the journal instituted "In Memoriam" to honor Med Chi members who have passed away, and "Welcome" to identify new Med Chi members. In addition, James Mersey, M.D., took over the responsibility for "A Clinical Moment with Diabetes" from DeWitt E. DeLawter, M.D., who had edited the department for many years.

There were 10 board meetings and one subcommittee meeting during the period. A total of 149 manuscripts were reviewed. Of these, 103 were initially accepted for publication, 14 were not approved, 25 were returned to authors with recommendations for revisions, and 7 were sent to guest reviewers for evaluation.

An *MMJ* subcommittee was formed to make recommendations to the full editorial board about the future direction of the journal. The subcommittee continues to meet as needed. Design changes to enhance readability were adopted, including the use of logos and new formatting for various departments.

Mary Betty Stevens, M.D., was selected as the winner of the sixth annual Best *MMJ* Article Award in the practitioner category for her comprehensive treatise, "The clinical spectrum of SLE," which appeared in the October 1991 issue. Santa J. Johnston, M.D., et al won the award in the best-article-by-a-resident category for the paper, "Inflammatory pseudotumor of the retroperitoneum," published in September 1991.

The editorial board is most grateful to those specialists who graciously contributed their time and expertise in reviewing manuscripts. The following physicians assisted in the *MMJ* review process during 1992: Lindsay S. Alger, M.D., J. Leonard Lichtenfeld, M.D., Margaret Rennels, M.D., and Andrew Ziskind, M.D. (A list of potential guest reviewers was established during the year by contacting department heads at the schools of medicine at Johns Hopkins and the University of Maryland.)

Total page count for Volume 41 was 1,172 (up 22 pages from the previous year). Distribution averaged 7,844 per month, up from 7,769 in 1991. Advertising space averaged 28 percent, down slightly from the previous year due partially to the increasing number of pages in the journal. Postage, paper, and production costs continued to rise, but income kept pace.

The Editorial Board of the *Maryland Medical Journal* encourages Med Chi members to communicate regularly and often about any and all facets of the publication. Constructive criticism, suggestions, and compliments are always welcomed.

Committee members

Editor Victor R. Hrehorovich, M.D.
Associate Editor Henry P. Laughlin, M.D., Sc.D., Sc.S.D.
Timothy D. Baker, M.D.
John W. Buckley, M.D.
Bayani B. Elma, M.D.
Kevin Scott Ferentz, M.D.
Barton J. Gershen, M.D.
Robert G. Knodell, M.D.
Herbert L. Muncie, Jr., M.D.
Marilyn S. Radke, M.D., M.P.H.
Eric S. Wargotz, M.D.

Advisory member

Carmine M. Valente, Ph.D.

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Maternal Welfare Subcommittee

Mr. President and Members of the House of Delegates:

The 1992-1993 year was very busy for the Maternal Welfare Subcommittee. At the beginning of the year, the subcommittee, with Med Chi's approval, entered into an agreement with the Department of Health and Mental Hygiene (DHMH). The agreement provided that DHMH would supply the subcommittee with a copy of the death certificate of each woman who was a maternal mortality in Maryland. The purpose was to analyze maternal mortality problems in order to write educational directives to be printed in the *Maryland Medical Journal*. No individual or institution involved would be named, as the reviews' total focus would be to address global problems in an educational format.

In conjunction with this effort, the subcommittee sent a letter to Maryland hospitals and the Maryland Hospital Association requesting cooperation. All Maryland hospitals with an obstetrics/gynecology department responded favorably to the request. The subcommittee assigned various members responsibility for the maternal mortality reviews. Russell W. Moy, M.D., spearheaded this effort and chaired the group. The initiative resulted in one maternal mortality review during the past year. Identification of maternal mortalities via death certificates was less fruitful than anticipated. Other avenues for identifying maternal mortalities are under consideration.

The subcommittee met with members of Med Chi's Substance Abuse Project (a grant administered under the guidance of Carmine M. Valente, Ph.D.) and answered questions about substance abuse recognition, counseling, and referral. The physicians' answers were incorporated into a survey being conducted by the project, and the committee was provided with initial survey results by the coordinator for the project, Karen Duszynski. The survey's initial results identified educational endeavors that should be pursued with regard to substance abuse recognition and treatment The subcommittee applauded Med Chi's efforts in this area.

A professional liability survey conducted by the American College of Obstetricians and Gynecologists (ACOG) was reviewed by the subcommittee. Evaluation indicated that there are several options for Maryland physicians. Med Chi provides a support group conducted by physician peers and other resources depending on the liability issue. The Medical Mutual Liability Insurance Society offers a professionally conducted support group, a professional one-on-one counseling program, and support services for spouses. Princeton Insurance Company provides a professionally conducted support group and one-on-one peer counseling.

The subcommittee also reviewed the American Medical Association's report from the Council on Scientific Affairs, *Induced Termination of Pregnancy Before and After Roe v Wade: Trends in the Mortality and Morbidity of Women.* This report revealed that abortion became much safer after 1973. Contraceptive use, antibiotics to manage sepsis, and an increase in physicians who provide safe abortions, all contributed to a decline in deaths from abortions. The risk of dying from pregnancy and childbirth was nearly 12 times the risk of dying from an induced abortion. The risk of serious complications from a legal abortion was low. Abortion was safest when

performed early in pregnancy by a well-trained, experienced physician working in a setting equipped to handle complications. Increasingly restrictive abortion laws in the United States would probably not result in mortality rates as high as those of 1940 through 1960. The subcommittee reviewed this information from an educational perspective only as the issue of support of, or opposition to, abortion is a matter for members to decide individually based on personal values and beliefs.

To assist the Montgomery County Health Department with a proposal asking for the provision of volunteer services for pregnant women in need of family planning services, the chairperson approached the membership of the Maryland Obstetrical and Gynecological Society about volunteering for services. The subcommittee also provided the name of a contact person with the Abell Foundation as a possible funding source for this endeavor.

A review of DHMH's funding cutbacks for local health departments resulted in the subcommittee's support for the Committee on Public Health's resolutions. The resolutions proposed restoring funds to local health departments and initiating a volunteer program to make physician services available where there was a need due to DHMH funding reductions.

At the request of President Jose M. Yosuico, M.D., the subcommittee reviewed the length-of-stay guidelines for mothers as dictated by insurance companies and Medical Assistance. Discussion centered around issues such as educational concerns, social concerns, and needed rest; however, subcommittee members noted that the guidelines had not produced a large number of re-admissions because of the change in length-of-stay for mothers. Therefore, the subcommittee did not view this matter as a medical concern. The president relayed this information to Virginia M. Thomas, vice-chairperson, Maryland House of Delegates.

An executive order removed the gag rule concerning abortion discussion by health care professionals in federally funded clinics. The subcommittee reviewed this order and suggested informing members of the change; it was subsequently reported in the *MMJ*.

A subcommittee member reported on the Food and Drug Administration's (FDA) hearings concerning proposed over-the-counter (OTC) contraceptives. He noted that the Centers for Disease Control and Prevention (CDC) supported OTC contraceptives. Concerns were expressed by subcommittee members about educational concerns, liability issues, and price considerations. The subcommittee will monitor this issue.

At one meeting, the issue of abortion reporting was raised. At the current time, abortion reporting is voluntary; it was noted, however, that there was a need for mandatory reporting because the data were important for family planning, primary care services, and reporting statistics to the CDC. Therefore, the subcommittee recommended that Med Chi support mandatory reporting of abortions because of the need to plan for prevention, family services, and primary care services. This recommendation was not supported by Med Chi.

A call for speakers for Med Chi's annual meeting prompted the subcommittee to sponsor a session on breast cancer prevention. In conjunction with the Committee on Public Health and



President Jose Yosuico, M.D., talks with Raymond Scalettar, M.D., during the Presidential Banquet.

the Maryland Medical Breast Society, the subcommittee sponsored "Mammography Potpourri: Screening, Problem Solving, and Clarification of Controversial Topics Surrounding Silicone Implants, Including Rheumatological Aspects."

Coordination with the Baltimore City Health Department's Healthy Start Program continued during this year. Subcommittee members, along with Roseanne M. Matricciani, R.N., J.D., chief operating officer, joined various Healthy Start program subcommittees to work on a medical record abstract tool, an interview tool, goals and objectives, committee formation, hiring of personnel for the Healthy Start Project, a committee review tool, confidentiality and immunity issues, and strategies for conducting Healthy Start reviews. The Maternal Welfare and the Infant, Child, and Adolescent subcommittees will participate in the Healthy Start Project, and Med Chi will oversee the effort. The subcommittee would like to thank Barbara Squires, director of the Healthy Start Program, Baltimore City Health Department, and Ginny Seyler, assistant director of the Health Program Alliance, for their assistance and guidance with regard to the Healthy Start Project.

Committee members

Chairperon Harrold T. Elberfeld, M.D.
Joyce M. Boyd, M.D.
Rudiger Breitenecker, M.D.
Harold D. Gabel, M.D.
Phillip J. Goldstein, M.D.
John A. Hawkinson, M.D.
Timothy R. B. Johnson, M.D.
Juanito F. Lopez, M.D.
Russell W. Moy, M.D.
J. Courtland Robinson, M.D.

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Liaison Committee with the Medical Assistance Program

Mr. President and Members of the House of Delegates:

During the 1992-1993 year, the Liaison Committee with the Medical Assistance Program began its year by assessing the progress of the Maryland Access to Care (MAC) program. One of the committee's first recommendations was to provide the membership with information about the new Eligibility Verification System (EVS), which is used in conjunction with the MAC program, is voice activated, enables physicians to receive important medical care information including prior medical problems, and is able, for the first time, to give physicians retroactive service information.

While many areas of the MAC program were moving forward and working well, numerous calls from emergency rooms for authorization for treatment and prior approval caused many physicians to request that the committee raise this issue with the Department of Health and Mental Hygiene (DHMH). After open discussion of the issue, The Honorable Nelson J. Sabatini, secretary, DHMH, wrote to hospital administrators and addressed the concerns raised by the committee on behalf of Med Chi physicians.

Another concern expressed by physician members to the committee related to the issue of malpractice exposure for MAC program physicians who must authorize or not authorize treatment based on information provided by hospital personnel over the telephone when the physicians have been assigned as MAC providers but have never seen the recipients. Investigation of this issue revealed that a physician's documentation about the telephone conversation along with the action recommended based on the information provided and filing of this information in the patient's record was sufficient documentation from a malpractice perspective. Notifying the caller that the physician must use his or her medical judgment as to the emergency nature of the situation and that the physician had never seen the patient were pertinent points to be verbalized and noted in the documentation.

The debate over the Provider Fee Project ceased when DHMH announced that the project ended on June 30, 1992. The committee had been closely following this issue since the project was introduced during the previous year, and the committee was active in keeping the membership informed about the project.

The Diabetes Care Program, which included an educational component, was discussed, and the committee provided the Medical Assistance program with input concerning course content and length of the course. As a result of this effort, the continuing medical education (CME) requirement was restructured.

DHMH initiated a Drug Use Review (DUR) Board during this last year. The purpose of the DUR Board was to make recommendations concerning standards and criteria for the Medical Assistance program with regard to drug utilization. The DUR would also be able to demand reports on drug utilization and direct that studies be undertaken. The commit-

tee recommended that Med Chi forward the name of Reed A. Winston, M.D., a member of the committee with an extensive background in pharmacology, as a DUR Board candidate. Dr. Winston was chosen to be a member of the DUR Board and is the committee's and Med Chi's liaison with the board.

Another issue affecting physician practice concerned the Medical Assistance program's requirement that the rendering physician be identified on the claim form when there is a coverage agreement and the billing physician's name is provided. This requirement was contrary to current practice for cross coverage situations and, in Med Chi's opinion, was not required by federal Medicaid/Medicare statute or regulation. The committee recommended that this issue be investigated, and DHMH is having its attorneys review the matter.

Inquiry concerning tubal ligations performed in an ambulatory setting led the committee to raise the issue with the Medical Assistance program since a procedure code had not been assigned for this procedure. Issues surrounding procedure coding for the facility and payment for the facility and the physician providing the service were raised and are being addressed by the Medical Assistance program.

A major issue affecting many members concerned the nonpayment of timely submitted claims by Medicaid. An investigation revealed that a number of claims had not crossed over from Medicare to Medicaid. In one instance, the claims (tape) had never been delivered to Medicaid. In other instances, the problem could not be readily identified. Rejection of claims in some cases was attributed to information being placed in the wrong location on the Health Care Financing Administration (HCFA) 1500 form. Numerous inquiries concerning this matter, however, led the committee to request that the Medical Assistance program provide a solution to the problem, especially since timely resubmission of claims was a problem, and payment was not forthcoming.

The Medical Assistance program reported to the committee that the problem appeared to be with the submission of paper claims and entry of the information by keypunch operators who do not read the information but simply enter it. If the claim was filled out incorrectly, the incorrect information would go into the computer, and the claim would not be paid. In response to the committee's request for a solution, the Medical Assistance program proposed the use of a form for all physicians submitting paper claims in order to alleviate the situation and get physicians paid. While the committee did not want to increase physicians' paperwork, the committee thought this solution was a reasonable temporary measure to assure that payment for services is rendered. Furthermore, the committee recommended, and Med Chi approved, that Med Chi support the proposed lengthening of the billing period for Medical Assistance from six months to nine months.

Other issues addressed by the committee included

- Dissemination of information about a DHMH cancer grant;
- Exploration with DHMH of the feasibility of having a centralized drug dispensing system for Medicaid patients;
- Review of state budget cuts and their effect on Medicaid patients, with dissemination of information about budget cuts;
- Review of the restriction on the use of H2 blockers and other medications; and
- Review of several cases concerning denial of payment for acute care.

The committee continues to be a liaison with the Medical Assistance program. Members would like to thank all physicians who brought issues and concerns to the committee's attention during this last year.



Dr. Allan Jensen serves as moderator for the Blue Cross/Blue Shield update session.

Committee members

Chairperson Joseph W. Zebley III, M.D.
Aristides C. Alevizatos, M.D.
Paul Burgan, M.D.
Irvin B. Kaplan, M.D.
Selvin Passen, M.D.
Margaret T. Snow, M.D.
Reed A. Winston, M.D.

Advisory members

Joseph W. Millstone
Mary Mussman, M.D., M.P.H.
Lawrence R. Payne
The Honorable Nelson J. Sabatini

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Committee on Medicine and the Performing Arts

Mr. President and Members of the House of Delegates:

During the 1992-1993 year, the Committee on Medicine and the Performing Arts sponsored three successful meetings. These were designed to educate various segments of the local health and arts communities and emphasized clinical demonstrations. The committee met six times.

The first event of the year was an afternoon seminar on Saturday, January 23, entitled "Overuse, Focal Dystonia, and Technique Impairment." The featured speakers were surgeon Hunter J. H. Fry, M.S., of Australia; Mark Hallett, M.D., clinical director of the National Institute of Neurological Disorders and Stroke in Bethesda; and Dr. Thomas Mastroianni, chairperson of piano at Catholic University in Washington, DC.



DR. DONALD DEMBO ASKS A QUESTION AT THE HOUSE OF DELEGATES MEETING.

Dr. Mastroianni gave an overview of the career and educational aspects of technique loss for musicians, especially pianists. Dr. Hallett discussed the roles of the central and peripheral nervous systems in overuse, focal dystonia, other musculoligamentous disorders, and nerve entrapment syndromes. Dr. Fry lectured on the symptoms and treatment of painful overuse and related loss of coordination. A panel discussion with these three speakers and Nguyet Dang, a biomedical engineer at the National Institutes of Health (NIH), focused on research conducted as part of a special interdisciplinary doctoral program created for Dr. Fry by NIH and Catholic University. Results are still preliminary, but may show a closer relationship between overuse and focal dystonia than previously recognized.

On March 20-21, the committee presented a second regional conference titled "Performing Arts Medicine II: Focus on Young Performers," as a follow-up to last year's initial meeting. This year's conference focused mainly on local speakers, including physicians, psychologists, occupational therapists, and Alexander and Feldenkrais techniques teachers. The emphasis was on subjects not covered previously, especially those which could be enhanced by actual demonstrations. Registrants participated in a short Feldenkrais technique lesson and had the opportunity to handle large percussion and brass instruments of marching bands.

The committee also sponsored a session at the Med Chi annual meeting on April 29 entitled "Cues and Clues in Performing Arts Medicine: Don't Miss a Diagnosis." Committee members Bernard E. Filner, M.D, Lawrence Funt, D.D.S., and Leo Rozmaryn, M.D., discussed sample cases that illustrated the complexity of treating performing artists. Three

performers demonstrated their problems and what solutions the health care team had found.

The committee oversaw a dedicated issue of the *Maryland Medical Journal* based on papers from the 1992 conference. The resulting journal was excellent, and many positive comments have been received. The committee also continues to receive requests for Music Medicine Clearinghouse bibliographies, photocopies, and research assistance from all over the country.

During the next year, the committee will expand its membership, revise service fees, and continue to publicize its activities. The committee has been invited to present a session at the semiannual meeting in September and plans to have a third regional conference in 1994.

Committee members

Chairperson John B. DeHoff, M.D.
Emidio A. Bianco, M.D.
Bernard E. Filner, M.D.
Leo M. Rozmaryn, M.D.
Lew C. Schon, M.D.

Advisory members

Sandra Bishop, M.S.
Ruth Drucker
David Fetter
Lawrence A. Funt, D.D.S.

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Committee on Medicine and Religion

Mr. President and Members of the House of Delegates:

The Committee on Medicine and Religion held two meetings during the 1992-1993 committee year. The committee is interested in expanding its membership by including members of as many faiths as possible. In this way, the group would have a broader view of the moral and ethical approaches of religion in relation to medical care.

The committee was pleased to present the prayer luncheon at the 195th annual meeting held at the University of Maryland at College Park. Jack Zimmerman, M.D., chief of surgery at Church Hospital, made a thought-provoking presentation, "Unnecessary Treatment in Hopeless Illness: Overutilization?," to the numerous physicians in attendance.

Committee members

Chairperson Leslie R. Miles, Jr., M.D.
Ralph E. Libby, M.D.
Robert E. May, M.D.
Rhodora C. Tumanon, M.D.
Gibson J. Wells, M.D.

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Jose Yosuico, M.D.; Joseph Snyder, M.D.; Raymond Scalettar, M.D.; and George Malouf, Sr., M.D., enjoy the Presidential Banquet

Committee on Mental Health

Mr. President and Members of the House of Delegates:

The Committee on Mental Health met eight times during the past year. The committee was pleased to sponsor the presentation, "Treatment of Depression as Secondary Prevention," at the 195th Med Chi annual meeting. The well-received presentation, which was funded by an educational grant from SmithKline Beecham Laboratories, was delivered by Jerrold F. Rosenbaum, M.D., associate professor of psychiatry at Massachusetts General Hospital and Harvard Medical School; Arthur Hildreth, M.D., chief of psychiatry at Union Memorial Hospital and president of the Maryland Psychiatric Society; and Paul McClelland, M.D., chairperson of the Department of Psychiatry at Greater Baltimore Medical Center.

After much review and consideration, the committee endorsed the distribution of the brochure from the Committee on Physician Rehabilitation, *Medical Treatment Never Includes Sexual Contact,* to all Maryland physicians.

To advocate on behalf of the mental health needs of Maryland citizens, two committee members were appointed to the Med Chi Ad Hoc Committee on Health Care Reform and to the Med Chi Committee on Managed Care and Third-Party Liaison.

The committee has been working eagerly to resurrect the monthly column, "Today's Psychiatry," in the *Maryland Medical Journal.* Manuscripts have been submitted to the editorial board for publication consideration. The committee looks forward to a productive 1993-1994 year.

Committee members

Chairperson Lino Covi, M.D.
Arnold Brenner, M.D.
Daniel F. Krank, M.D.
Mohamad A. Lofti, M.D.
Edward L. Suarez-Murias, M.D.
Ronald J. Taylor, M.D.
Mehdi L. Yeganeh, M.D.
Leonard M. Zullo, M.D.

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Peer Review Committee

Mr. President and Members of the House of Delegates:

The Peer Review Committee is charged with "reviewing the practices of Maryland physicians as referred by the Peer Review Management Committee upon the request of the State of Maryland Board of Physician Quality Assurance ... for the purpose of evaluating the professional, physical, and mental competency of physicians. This review shall include, but not be limited to, the quality of care rendered and shall be conducted within the guidelines set forth in the *Peer Review Handbook.*"

In furtherance of this charge, the Peer Review Committee prepared numerous peer review reports during its 1992-1993 term pursuant to referrals from the Board of Physician Quality Assurance (BPQA) through the Med Chi Peer Review Management Committee. Numerous meetings were held, including both full committee and subcommittee meetings. Committee members and other physicians also contributed to the work of the committee by reviewing and reporting on charts and by conducting office evaluations. The work of the members does not end with the conclusion of the committee's investigation, since additional record reviews and meetings with members of the staff of the attorney general to prepare cases for legal action also may be required. The seriousness of the cases referred to the committee is evidenced by the fact that over one-third of the physicians on whom reports were prepared in calendar year 1992 were referred by the BPQA to the Office of the Attorney General to be charged with violation of the Medical Practice Act based on the peer review report. A major concern of the committee continues to be improving the speed with which peer reviews are conducted and reported back to the BPQA, while preserving both fairness and quality in the review process.

The committee regularly uses physicians who are not committee members as specialty consultants in each review. Therefore, the committee needs additional reviewers and welcomes any volunteers who wish to assist in this important work.

My sincere thanks to the dedicated members of this commit-

tee, to our many specialty consultants, and to the Med Chi staff for their support and assistance during this past, very busy year.

Committee members

Chairperson Paul Burgan, M.D.
Co-Chairperson Henry J. Farkas, M.D.
Co-Chairperson James W. Karesh, M.D.
Fritz Apollon, M.D.
Amir S. Banisar, M.D.
David M. Cook, M.D.
Augusto R. DeLeon, M.D.
Anand M. Dhanda, M.D.
Liebe S. Diamond, M.D.
William N. Fitzpatrick, M.D.
John G. Frizzera, M.D.
Bernard A. Heckman, M.D.
A. Clark Holmes, M.D.
Victor R. Hrehorovich, M.D.
Tah-Hsiung Hsu, M.D.
Charles W. Kinzer, M.D.
Alfred L. Lapin, M.D.
M. Isabelle MacGregor, M.D.
Reynaldo P. Madrinan, M.D.
Raymundo S. Magno, M.D.
George S. Malouf, Jr., M.D.
Stanley L. Minken, M.D.
Elie A. Sayan, M.D.
William I. Smulyan, M.D.
Larry A. Snyder, M.D.
Paul D. Sullivan, M.D.
Larry G. Tilley, M.D.
Richard L. Wolfe, M.D.

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Peer Review Management Committee

Mr. President and Members of the House of Delegates:

The Peer Review Management Committee (PRMC) has continued its function of overseeing the peer review process as specified in the *Peer Review Handbook for Maryland.* The committee meets monthly and is responsible for the following duties:

- Receiving and recording cases referred to Med Chi by the Board of Physician Quality Assurance (BPQA);
- Identifying the guidelines used in conducting the review;
- Referring cases to the appropriate medical review committee;
- Developing and maintaining a monitoring procedure allowing for an immediate status determination of a peer review complaint and ensuring that the review is completed in a timely manner;
- Reviewing reports received from investigating committees to determine their adequacy;
- Identifying inadequacies in writing and returning a report to the review committee if the committee finds a report inadequate;
- Transmitting adequate reports to the BPQA;
- Forwarding a copy of final disposition reports received from the BPQA to the appropriate medical review committee;
- Identifying areas in which medical review committees need education, and arranging to have the necessary education provided;
- Providing organizational assistance to any medical review committee in Maryland; and
- Periodically meeting with the BPQA to decide what kinds of statistical information are needed by the BPQA, Med Chi, and component societies to aid in evaluating and upgrading the review process.

In addition to providing direction to the peer review committees of Med Chi and component societies regarding the review of cases referred to Med Chi, the PRMC lent support, during the past year, to the effort to preserve the $50 license fee as a dedicated source of funds for Med Chi's physician rehabilitation and peer review activities.

The PRMC sought to improve the peer review process by educating peer review groups regarding the guidelines established in the *Peer Review Handbook for Maryland* (*Handbook*) for the conduct of review activities. Education occurred at local and specialty society peer review committee meetings and by the PRMC's insistence that all reports be in compliance with the *Handbook's* guidelines before being transmitted to the BPQA. PRMC representatives also regularly attended the meetings of the BPQA.

The chairperson thanks all committee members, Med Chi staff, and the members and staff of all Med Chi and component peer review committees for their efforts and support which enabled the PRMC to make a significant contribution to the efficacy and fairness of the review process.

Committee members

Chairperson Ronald J. Cohen, M.D.
Pablo E. Dibos, M.D.
Jesse M. Hellman, M.D.
Joseph H. Hooper, M.D.
Francis C. Mayle, Jr., M.D.
Davis S. McHold, M.D.
Mark S. Seigel, M.D.
Donald S. Stepita, M.D.
Karl H. Weaver, M.D.
Herbert L. Yousem, M.D.

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Physician/Patient Relations Committee

Mr. President and Members of the House of Delegates:

The Physician/Patient Relations Committee (PPRC) continues to investigate complaints against physicians. These complaints are investigated at the request of the Board of Physician Quality Assurance (BPQA). The PPRC's findings and recommendations are submitted to the BPQA for consideration and disposition.

In this past year, the PPRC assumed responsibility for screening Health Claim Arbitration Office (HCAO) cases received from the BPQA. After consideration of the PPRC's extensive experience in review of single incidents, the PPRC was asked to accept responsibility for screening these cases. Since this assignment was made, the PPRC has been meeting to screen HCAO cases on a monthly basis. Once reviewed, the PPRC's findings are forwarded to the BPQA, which determines, after considering the PPRC's findings, whether the cases require a more extensive peer review.

The dedication and commitment of PPRC members and staff to the continuation and improvement of the peer review process is deeply appreciated.

Committee members

Chairperson Lois E. Wehren, M.D.
Vice-Chairperson Norris L. Horwitz, M.D.
Ruben F. Ballesteros, M.D.
David S. Davis, M.D., J.D.
Jack D. Francis, M.D.
Mary B. Gorman, M.D.
Gay M. Guzinski, M.D.
Joseph H. Hooper, M.D.
Thomas E. Hunt, M.D.
Danilo G. Lee, M.D.
Robert A. Liss, M.D.
Michael S. Madeloff, M.D.
Anwar Mumtaz, M.D.
Ruben Reider, M.D.
Benjamin Rothfeld, M.D.
Lex B. Smith, M.D.
W. Haddox Sothoron, M.D.

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Committee on Physician Rehabilitation

Mr. President and Members of the House of Delegates:

The Committee on Physician Rehabilitation has continued to maintain its umbrella of advocacy for Maryland physicians. In collaboration with the Committee on Alcoholism and Chemical Dependency, the committee sponsored a highly successful conference, "The Third Annual Conference on Addiction: Physician Health and Education," on November 21, 1992. The committee looks forward to cosponsoring another addiction conference in the fall of 1993.

Also with the Committee on Alcoholism and Chemical Dependency, the committee sponsored tobacco advertisement warning labels for waiting room magazines containing tobacco advertisements. The labels were forwarded to Maryland physicians via direct mail, the *Maryland Medical Journal,* and *Straight Forward.* The labels received wide coverage, including a press conference to introduce them. They have been well received by the medical community.

The committee strives to continue to assist Maryland physicians. The committee's newsletter, *Straight Forward,* continues to inform and educate physicians and other allied health professionals on substance abuse issues.

Due to the dedication and collaboration of committee members and the Maryland Psychiatric Society's Peer Review Committee, the brochure, *Medical Treatment Never Includes Sexual Contact*, was published in the spring 1993 issue of *Straight Forward*. The committee has received several requests from other states for copies of the brochure.

The committee was pleased to sponsor the presentation, "Recent Breakthroughs in Understanding and Reducing Physician Stress," by Mort Orman, M.D., at Med Chi's 195th annual meeting. The presentation was well received.

Outreach presentations continue to be made to hospital medical staffs throughout the state and to component and medical specialty societies as well. Overall, the presentations have been well received. Outreach efforts took committee members and staff to 53 different venues at which program information was presented to close to 4,000 people, nearly 2,500 of whom were physicians. Included in outreach was distribution of information on the Physician Rehabilitation Program to 115 Maryland district court judges.

Suggestive of the effectiveness of outreach efforts, "concern calls" have remained at a high level. A concern call, or referral, instigates the assessment process. In calendar year 1992, 112 new concern calls were recieved. Board of Physician Quality Assurance (BPQA) referrals comprised about 17% of 1992 referrals, representing a 58% increase in BPQA referrals. Also conducted were nearly 2,000 phone contacts with program participants and over 1,100 phone contacts with treatment professionals. In calendar year 1992, the program conducted nearly 600 individual sessions and over 1,200 urine screen contacts with program participants. There has been some increase in referrals for mental health and emotional problems, including sexual-related issues and stress from malpractice litigation. In response to the stress reaction to malpractice suits, the Committee on Physician Rehabilitation is initiating efforts to provide litigation stress support services to colleagues.

During the past legislative session, committee members testified and campaigned for amendments to SB 371 and HB 232 to maintain the physician licensure fee funding for Med Chi's physician rehabilitation, peer review, and focused professional education programs. Chairpersons from the respective committees sought to educate members of the House and Senate committees involved in hearings on SB 371 and HB 232 as to the value of the programs endangered by the bills. Senators seemed impressed with the valuable work the committee has been doing, and all agreed that dismantling the program would be a mistake. Committee representatives were able to demonstrate that the program is dedicated to helping physicians, and that the program has been, and will continue to be, accountable to the state in regard to the use of physician licensure fee funds. It was also clarified to Senate committee members that Med Chi's Physician Rehabilitation Program is the only statewide organization for assisting impaired physicians.

The Committee on Physician Rehabilitation is pleased with the advances made in the past year and looks forward to continued growth in the next. The chairperson wishes to express his regard and appreciation to the hardworking and dedicated committee members who continue to give unselfishly of their time and energy to the important work of this committee.

Committee members

Chairperson Stanley R. Platman, M.D.
William E. Abramson, M.D.
Frederick P. Alpern, M.D.
Frederico H. Arthes, M.D.
Leroy C. Bell, M.D.
Nathan L. Centers, M.D.
Jacqueline Chang
Maxie T. Collier, M.D.
Morris Z. Effron, M.D.
Cyril G. Hardy, M.D.
Beada H. Hill, M.D.
Susan J. Kalia, M.D.
Edward J. Kitlowski, M.D.
Christie G. Lamping, M.D.
Philip H. Lavine, M.D.
Robert M. Marine, M.D.
Dan H. McDougal, M.D.
Patricia A. McIntyre, M.D.
Donald C. Meek, M.D.
Edson B. Moody, M.D.
Claro Pio Roda, M.D.
Michael S. Propper, M.D.
Edward T. Schnoor, M.D.
John R. Steinberg, M.D.
Maxwell N. Weisman, M.D.
Raymond A. Wertheim, M.D.

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Ad Hoc Review Committee on Physicians with Bloodborne Pathogens

Mr. President and Members of the House of Delegates:

In August 1992, the president of Med Chi created the Ad Hoc Review Committee on Physicians with Bloodborne Pathogens. The committee's purpose is to plan and implement a process to carry out the *Practice Protocol for Physicians with Human Immunodeficiency Virus (HIV),* which the Med Chi House of Delegates adopted on September 14, 1991.

The goal of the Ad Hoc Review Committee on Physicians with Bloodborne Pathogens is to protect the public by assuring safe medical care. To accomplish this goal, the committee will meet with a physician who has had a confirmed positive test for HIV, hepatitis B virus (HBV), or other bloodborne pathogen to evaluate the potential transmission risk of the physician's infection to patients through exposure-prone invasive procedures. The committee will establish a list of exposure-prone invasive procedures normally performed in the practice of the physician's specialty and identify those procedures that the condition will prevent the physician from performing safely. In addition to referrals from the Board of Physician Quality Assurance (BPQA), the committee will receive self-referrals.

In its first nine months, the committee met several times to complete the instructions and guidelines for one referral from the BPQA and to draft a handbook to define its process and policies. When staff of the American Medical Association (AMA) reviewed parts of this handbook, the AMA considered the handbook the most detailed document on this issue put together by any state medical society in the country. Med Chi Council adopted the handbook on March 18, 1993.

Committee members

Chairperson John G. Bartlett, M.D.
Eric M. Fine, M.D.
Jack M. Zimmerman, M.D.

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Committee on Professional Ethics

Mr. President and Members of the House of Delegates:

The members of the Committee on Professional Ethics took action on a variety of issues of public and professional concern. Some of the areas in which this committee took an active interest are highlighted below.

The committee closely monitored and contributed to the development of Maryland's Health Care Decision Act—the advance directives legislation. Two versions of this legislation were presented to the Maryland General Assembly. One was drafted by a commission under the leadership of the Honorable John Carroll Byrnes, a circuit judge for Baltimore City. The second, modeled after a similar law passed in Virginia, was put together by a committee headed by law professor Diane Hoffman and the Honorable John F. Fader II, circuit judge for Baltimore County. The final legislation combined the best of both these bills; the Committee on Professional Ethics recommended a series of admendments to these bills, all of which were adopted into the final act.

The committee also recommended the preparation of a "Do Not Resuscitate" bill directed to emergency care. Although this bill (HB 1602) was introduced in the House of Delegates, it received an unfavorable report in the House Environmental Matters Committee and was not enacted.

The committee was also involved in the self-referral debate this year. Working in conjunction with the Med Chi Ad Hoc Committee on Self-Referral, the Committee on Professional Ethics adopted the position that Med Chi should oppose any further legislation restricting referrals, and that Med Chi should create a standing committee to deal with the ethical aspects of self-referral issues as they arise; the standing committee would be guided by the position of the American Medical Association Council on Ethical and Judicial Affairs. To some extent, the committee's position was preempted by action of the Maryland General Assembly, which enacted HB 1280, substantially restricting self-referral and investment activities.

As authorized under the Maryland corporation law, the committee continued to pass on the ethical propriety of specific professional corporate names. Further, the committee considered and adopted an amendment to the Med Chi *Compendium of Laws, Regulations, Opinions and Policies Governing the Practice of Medicine in Maryland,* Section 502.03, clarifying the propriety of advance payment for medical services and a physician's ethical requirement to refund such payment in the event of cancellation.

It should be noted that this year marked the last year of distinguished service by Louis C. Breschi, M.D., as chairperson of the Committee on Professional Ethics; after many years in this capacity, Dr. Breschi has turned over the duties of chairperson to Leslie R. Miles, Jr., M.D., who will carry on the mission of this committee to maintain the high standards of ethical propriety that characterize the practice of our profession in this state.

Committee members

Chairperson Louis C. Breschi, M.D.
Edilberto Beltran, M.D.
Jack C. Childers, M.D.
Beverly A. Collins, M.D.
Deogracias V. Faustino, M.D.
Eugene Guazzo, M.D.
Joseph H. Hooper, M.D.
Stephen N. Jones, M.D.
Don M. Long, M.D.
Leslie R. Miles, Jr., M.D.
Benjamin Rothfeld, M.D.
Henry J. Silverman, M.D.
H. Russell Wright, Jr., M.D.
Jack M. Zimmerman, M.D.

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PRO Monitoring Committee

Mr. President and Members of the House of Delegates:

The PRO Monitoring Committee began its year by reviewing the 1991-1992 PRO Annual Report published by the Delmarva Foundation for Medical Care, Inc. (Delmarva), which is the professional review organization (PRO) for Maryland and which oversees the inpatient care of Maryland Medicare beneficiaries under a contract with the Health Care Financing Administration (HCFA). It was noted in this report that only one Maryland physician had been formally sanctioned during the previous year. Confirmed quality problems were reviewed, and inpatient quality review was discussed.

The committee's main thrust continued to be assisting physicians who have been assigned quality points by Delmarva. The committee served as a source of information and support for these physicians.

A utilization review case was referred to the committee this year, and guidance and information was provided to the practitioner who referred the case. Although this case pertained to Medical Assistance, the committee provided assistance because Delmarva has the utilization contract for the Maryland Medical Assistance Program.

The committee invited Christian E. Jensen, M.D., Delmarva's corporate medical director and president, to make a presentation on the Fourth Scope of Work—the new HCFA initiative. This new scope of work addresses HCFA's approach to the medical review of Medicare beneficiaries and is called the "Health Care Quality Improvement Initiative (HCQII)." It will look at a broad overview of quality. It will begin in July 1993 and will emphasize cooperation and working toward common goals. HCQII is focused on improving the mainstream of care and elevating the general standard of care. Patterns of care and outcome rather than an individual physician's work will be targeted. Under this new scope of work, PRO and Medicare claims data will be used to create treatment outcome profiles for hospitals and physicians. One initiative will be the miniature hospital information project. In this initiative, the PROs will try to duplicate HCFA's mortality data. The second initiative is called the National Cooperative Cardiovascular Project, which will look at myocardial infarction, bypass surgery, and coronary angioplasty. It is going to examine the comparative results of treatments in different institutions. The committee will follow this new initiative and its impact on physicians and patients, as well as provide feedback to Delmarva.

In many cases reviewed by the committee this year, quality points assigned to physicians were erased or decreased. The committee has been vigilant in addressing hassle factor issues and issues surrounding the conduction of chart reviews with Delmarva. It is the committee's sincere hope that the Fourth Scope of Work will allow a more cooperative and educational approach by the PROs.

As always, the committee is available to assist Med Chi's membership with questions or concerns involving PRO activities. The commitee thanks the membership for bringing issues to the committee's attention.

Committee members

Chairperson Augusto R. DeLeon, M.D.
Marion Friedman, M.D.
Vernon M. Gelhaus, M.D.
Roland V. Goco, M.D.
Sheldon Goldgeier, M.D.
Howard J. Hoffberg, M.D.
John B. MacGibbon, M.D.
Francis C. Mayle, Jr., M.D.
Robert Ruderman, M.D.
Karl H. Weaver, M.D.

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Committee on Public Health

Mr. President and Members of the House of Delegates:

The Committee on Public Health began the 1992-1993 year by discussing major public health concerns surrounding cancer and family violence. The committee reviewed information on the Maryland Cancer Control Plan Media Campaign and the state's effort to aggressively address cancer prevention.

Because of severe budgetary cuts proposed to deal with the state's fiscal crisis, the committee reviewed and discussed Plan 1 and Plan 2 posed by Governor William Donald Schaefer. Review of these plans revealed severe reductions to state and local health departments. Therefore the committee recommended that Med Chi adopt the following resolutions:

- *Resolved*, That the Medical and Chirurgical Faculty of Maryland urges the governor to restore $11.6 million of proposed reductions from the $450 million package to support state and local health departments' relationships to maintain necessary preventive, early detection, and intervention and restorative services to those most in need within the state of Maryland.
- *Resolved*, That the Medical and Chirurgical Faculty of Maryland shall take a leadership position in responding to patient needs by making every effort to ensure that each component medical society works in harmony with their respective county/city health department to provide, voluntarily, those specific medical services that are required in their specific geographical area, which will not be available due to the reduction of funding for these programs.

Both resolutions were approved by Med Chi with Med Chi amending the second resolution to read:

- Therefore, be it *Resolved*, That the Medical and Chirurgical Faculty of Maryland takes a leadership position in responding to patient needs by encouraging each component medical society to work with their respective county/city health department to provide, voluntarily, medical services, which will not be available due to the reduction of funding for local health department programs.

Med Chi encouraged component medical societies to work closely with local health departments on the issue of voluntary physician services. The committee noted that Med Chi's efforts with regard to funds restoration for local health departments may have been the impetus for the restoration of part of those funds in the state's new budget, and that the voluntary effort by physicians to donate preventive health care to the public helped fill gaps created by the state's budgetary cuts. The chairperson participated in Med Chi's news conference, which highlighted the importance of the restoration of funds and the volunteer effort proposed by Med Chi.

Budgetary cuts raised concerns about the cancellation of children's orthopaedic clinics at local health departments, and the matter was referred to the committee. Due to reductions in funding, nine counties (mostly rural) terminated orthopaedic clinics. This issue was referred to Judson F. Force, M.D., M.P.H., director of Children's Medical Services, Department of Health and Mental Hygiene (DHMH), for his assistance in determining the impact of orthopaedic clinic terminations on continuing access and provision of these important specialty services. This issue is still being pursued.

Prisoners' medical needs was an issue submitted to the committee for review. Discussion addressed delivery of care, contagious diseases, the aging prison population, and lack of follow-up care when a prisoner is no longer incarcerated.

The committee discussed a bill introduced in Prince George's County on the banning of pit bulls and Rottweilers. The committee refrained from taking a position in this matter.

Governor William Donald Schaefer's initiative, "Partnership for Healthy Living," was reviewed. His proposal focused on women and children with an emphasis on disease prevention, health education, health promotion, and health policy. The initiative included a health mobile. Committee members discussed their experiences with health mobiles and the problems associated with recordkeeping, continuity of care, and reportability. Other endeavors included tobacco-free posters, physical fitness projects in schools, and injury prevention. Several of these aspects were forwarded to the committee's subcommittees for review and possible implementation.

DHMH embarked on an endeavor that coincided with the governor's cancer initiative. With outside funding, DHMH set up a program to pay for the diagnosis and treatment of breast and cervical cancer. The committee reviewed the endeavor and

noted that DHMH decided to reimburse health care providers at the Medicaid rate rather than the Medicare rate, even though local health departments and Med Chi supported reimbursement at the Medicare rate in order to attract physician participants and assure the program's success. The committee suggested that President Jose M. Yosuico, M.D., forward a letter to DHMH expressing concern over the choice of reimbursement for these services. The president agreed with the committee's suggestion, and an effort was made to change the reimbursement level, but it was not successful.

During the last year, the American Medical Association (AMA) revised its plan to reform America's health care system, "Health Access America." The committee reviewed the plan's changes and recommended Med Chi's continued support. Med Chi has continued to support "Health Access America," and forwarded the information to the Maryland Health Resources Planning Commission when it embarked on a project to compare health system reform plans.

Correspondence from a consumer concerning the need to continue to provide routine physical examinations at the Social Security Administration was referred to J. Michael McGinnis, M.D., deputy assistant secretary for health, Office of Disease Prevention and Health Promotion, DHMH. Dr. McGinnis agreed with the committee that targeted screening based on risk factors needed to be recommended, and he supported the committee's efforts in this area. Dr. McGinnis addressed the matter directly with the Social Security Administration.

Because of increased violence in our society and the concern that family violence was not being properly addressed, the committee reviewed and discussed various initiatives in this area. Some initiatives evaluated were from the AMA, Howard County Violence Prevention Task Force, Wisconsin, the Family Violence Prevention Fund, the Massachusetts Medical Society, and Ohio. Joanne Tulonen, executive director of the Maryland Alliance Against Family Violence, was invited to speak to the committee and provide an overview of the alliance's efforts. Committee deliberations resulted in a commitment to pursue a campaign aimed at educating physicians about family violence. Activities centered on this endeavor will be pursued in the coming year; the timeliness of a seminar about domestic violence, however, was recognized by the committee, and a seminar was cosponsored by the committee, the Public Relations Committee, and the Med Chi Auxiliary entitled, "Preventing and Responding to Domestic Violence: What Every Physician Should Know."

The committee continued to be the oversight committee for the following subcommittees: Immunizations and Infectious Diseases Subcommittee; Infant, Child, and Adolescent Health Subcommittee; Maternal Welfare Subcommittee; and Sports Medicine Subcommittee

Committee members

Chairperson Martin P. Wasserman, M.D.
Robert J. Ancona, M.D.
Timothy D. Baker, M.D.
Alan D. Bedrick, M.D.
Joyce M. Boyd, M.D.
Beverly A. Collins, M.D.
John B. DeHoff, M.D.
Harrold T. Elberfeld, M.D.
Vincent D. Fitzpatrick, M.D.
Harold D. Gabel, M.D.
Carol W. Garvey, M.D.
Nelson G. Goodman, M.D.
Ronald L. Gutberlet, M.D.
David L. Kreisberg, M.D.
Juanito F. Lopez, M.D.
Hilary T. O'Herlihy, M.D.
J. Courtland Robinson, M.D.
Joseph W. Zebley III, M.D.

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JOSEPH SNYDER, M.D., 1993-1994 MED CHI PRESIDENT (R), PRESENTS A WATCH TO THE OUTGOING PRESIDENT, JOSE YOSUICO, M.D.

Committee on Public Relations

Mr. President and Members of the House of Delegates:

The Committee on Public Relations began the 1992-1993 year by reviewing existing public relations programs and opening discussion for new programs. The committee agreed to focus on two new campaigns—breast cancer awareness and family violence—and to continue successful ongoing programs including the Doctor/Lawyer/Teacher Partnership Against Drugs, public service announcements, the radio "Consultation" program, and various awards.

Breast cancer awareness. The Public Relations Committee worked in cooperation with the Med Chi Auxiliary to encourage Med Chi to sponsor two billboards with the message: "Your chance of getting breast cancer is ONE IN NINE. Mammography. Your most powerful weapon." The campaign's purpose was public awareness. The billboards were displayed on Route 50 for viewing by traffic traveling to and from Ocean City, Maryland. They were displayed from the middle of September until the middle of October (breast cancer awareness month) and included a sponsorship line crediting the Maryland State Medical Society.

Family violence. The Public Relations Committee, in alliance with the Committee on Public Health and the Med Chi Auxiliary, concentrated efforts on a campaign against family violence. As an initial effort, the committee recommended a resolution pertaining to family violence, which was adopted by Council. The resolution addressed the need to increase awareness and sensitivity on the part of physicians and the community. In response, a session entitled "Preventing and Responding to Domestic Violence: What Every Physician Should Know" was held during the annual meeting. C. Sue Hecht, president, Maryland Network Against Domestic Violence, and Susan C. Mize, executive director, Maryland Network Against Domestic Violence, presented the program and provided participating physicians with a reference guide entitled *Partners in Prevention.* This valuable resource included a service provider directory with information about each domestic violence program and a list of services arranged by county. Med Chi and the Maryland Network Against Domestic Violence plan to work together to address and prevent domestic violence in Maryland.

Partnership program. The Doctor/Lawyer/Teacher Partnership is a successful community program coordinated by the Public Relations Committee. Through this program, doctors and lawyers visit local schools to talk with students about the medical and legal consequences of drug and alcohol use. This year, partnership programs were conducted in Baltimore City, Baltimore County, Harford County, and Prince George's County. Med Chi conducted a training session for physicians wishing to participate. During the training session, physicians were provided with "Drugs are a Deadly Game" posters to use as visual aids.

Public service announcements. The Public Relations Committee distributed three public service announcements (PSAs) from the American Medical Association to local television stations. The three messages, an anti-cocaine campaign, "Don't Blow It"; an anti-smoking campaign, "Ashes to Ashes"; and an AIDS (acquired immunodeficency syndrome) prevention campaign, "Play It Safe," were broadcast by local networks throughout the 1992-1993 year. These PSAs provide a valuable community service and make people aware of the state medical society's existence.

Radio program. Health-related topics and issues surrounding today's medical community are discussed on the Med Chi–sponsored radio program, "Consultation," a physician interview show broadcast on WBAL-AM radio at 9:30 a.m. on Sunday mornings. Fifty-six physicians participated in the 1992-1993 year.

Awards. The committee continued to sponsor its awards programs, including the Wyeth-Ayerst Laboratories Physician Award for Community Service, which is presented yearly to a physician who has provided outstanding community service outside the field of medicine. John O. Meyerhoff, M.D., received the 1993 award during the annual meeting for his work with Parents Anonymous of Maryland.

The Third Annual Award for Excellence in Organized Medicine, an award created to encourage medical student involvement in organized medicine, was presented to Jeffrey Jonathan Wise, a medical student at the University of Maryland School of Medicine, during the annual meeting.

The Public Relations Committee also sponsored the Thirteenth Annual Photo Contest. Med Chi and auxiliary members entered 14 photographs, which were judged by Evan Cohen, a professional photographer from Baltimore. Jerrold M. Post, M.D., won first place and Mrs. Morrell Williams won second place. All entries in the photo contest were displayed during the annual meeting.

Certificates of recognition were presented, during the House of Delegates session of the annual meeting, to four physicians for their outstanding service and dedication as Med Chi committee chairpersons. President Jose M. Yosuico, M.D., presented certificates to Paul A. Stagg, M.D., chairperson, Ad

Hoc Committee on Self-Referral; Harrold T. Elberfeld, M.D., chairperson, Maternal Welfare Subcommittee; Ronald Fishbein, M.D., chairperson, Ad Hoc Bicentennial Committee; and John G. Bartlett, M.D., chairperson, Ad Hoc Review Committee on Physicians with Bloodborne Pathogens.

With so much of today's attention focused on the health care industry and health care reform, the committee faces a challenge to improve physicians' public image. The committee always welcomes suggestions and comments from Med Chi members on all activities. As chairpersons, we would like to thank committee members and all participating physicians whose time and effort have made this a productive year.

Committee members

Chairperson Hiroshi Nakazawa, M.D.
Vice-Chairperson Andrew P. Fridberg, M.D.
K.G. Dritsas, M.D.
Vincent D. Fitzpatrick, M.D.
Rafael C. Haciski, M.D.
Thomas F. Krajewski, M.D.
Gholam R. Sadjadi, M.D.

Advisory members

Fred Magaziner, D.D.S.
Gino Zarbin

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Committee on Scientific Activity

Mr. President and Members of the House of Delegates:

In 1992, the bylaws of the Committee on Scientific Activity were modified. The committee was expanded to nine members, who will serve three-year terms. Three new members will be appointed each year.

The committee met eight times during the past year and developed educational activities approved for 76 credit hours in Category 1 of the Physician's Recognition Award of the American Medical Association. These included the following:

- the Med Chi semiannual meeting at the Princess Hotel in Ocean City (15 hours)
- the president's regional meetings (3 hours)
- the "Third Annual Conference on Addiction: Physician Health and Addiction" (7.5 hours)
- the second annual program on medical problems of performing artists, "Performing Arts Medicine: Issues in Diagnosis and Management" (9 hours)
- "Substance Abuse Education for Primary Care Physicians: An Overview of Treating Substance-Abusing Patients" (2 hours)
- "Substance Abuse Education for Primary Care Physicians: An Overview of Treating Substance-Abusing Patients"—Home study program (3 hours)
- "Alcohol Use and Pregnancy Outcome" (1 hour)
- the Med Chi annual meeting at the University of Maryland at College Park (35.5 hours)

It is through the efforts of the entire committee that these programs and activities have been so well received and worthwhile. I want to take this opportunity to express my appreciation to all committee members.

Committee members

Chairperson J. Richard Lilly, M.D.
Benjamin V. Del Carmen, M.D.
Gershon Efron, M.D.
Kevin S. Ferentz, M.D.
Victor R. Hrehorovich, M.D.
Jose Martinez, M.D.
Myron I. Murdock, M.D.
Stanley R. Platman, M.D.
Walker R. Robinson, M.D.

Advisory member

Marianne U. Chiccone, D.M.D.

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Ad Hoc Committee on Self-Referral

Mr. President and Members of the House of Delegates:

At its meeting of September 19, 1992, Med Chi's House of Delegates referred the subject of self-referral to an Ad Hoc Committee on Self-Referral. The committee's charge was to study self-referral issues from various standpoints including ethical, legal, and legislative. The committee was instructed to analyze and evaluate the continuing debate on self-referral, make pertinent literature available, and report its findings and recommendations to Council and the Executive Committee.

At the committee's first meeting, members reviewed the current Maryland self-referral law and key legislation from New York, Illinois, Florida, New Hampshire, Virginia, Connecticut, and Missouri. Report C of the American Medical Association (AMA) Council on Ethical and Judicial Affairs (CEJA) was also reviewed. An analysis of the information resulted in a preliminary report that defined the issue to be studied by the committee as follows: Self-referral is the situation in which a physician refers a patient to a health care provider (business) in which s(he) has a financial interest, but does not perform any of the professional services.

The committee took the following position on self-referral:

- ✦ Self-referral, with disclosure of the financial relationship, is ethical.
- ✦ Excessive utilization for the purpose of the physician's financial benefit is unethical whether or not it involves self-referral.
- ✦ Self-referral is not illegal as long as it conforms to the terms of existing law.
- ✦ Underutilization in order to avoid the physician's financial loss is also unethical regardless of whether there is self-referral.

At the committee's second meeting, CEJA's Report E concerning conflicts of interest (self-referral) was reviewed along with information from the Medical Society of Virginia, a review of joint ventures among health care providers in Florida, a study on self-referral conducted by Charles River Associates, and articles from the *Journal of the American Medical Association* (i.e., "Consequences of physicians' ownership of health care facilities—Joint ventures in radiation therapy," "Increased costs and rates of use in the California Workers' Compensation System as a result of self-referral by physicians," "'Self-Referral'—What's at stake?," "Physicians' utilization and charges for outpatient diagnostic imaging in a Medicare population," and "Physician ownership of physical therapy services"). After this meeting, the committee made the following four-part proposal:

- ✦ Whereas legislation produces regulation that increases the cost of medical care and, ultimately, has a negative impact on the consumer;

  Whereas federal legislation is pending that will address this issue, and state legislation will be a redundant regulatory burden; and

  Whereas the Medical and Chirurgical Faculty of Maryland (Med Chi) believes that physicians can regulate themselves;

  Therefore, for the above reasons, Med Chi believes that state legislation on self-referral would be unnecessary.
- ✦ That Med Chi support the report of the Council on Ethical and Judicial Affairs of the American Medical Association on the issue of self-referral as accepted by the House of Delegates at the AMA interim meeting in December 1992.
- ✦ That Med Chi establish a standing committee on self-referral to implement the AMA position and to adjudicate specific situations.
- ✦ That the Ad Hoc Committee on Self-Referral be dissolved since it has completed its assigned duties.

At its meeting of January 21, 1993, Council approved all the committee's recommendations.

During the 1993 legislative session, HB 1280 was introduced. This bill prohibited a health care provider from referring a patient to a health care entity in which the health care provider, the provider's immediate family member, or the provider in combination with his or her immediate family member owns a beneficial interest or has a compensation arrangement. There were certain exceptions in the bill, penalties were established, and a study concerning self-referral was to be instituted.

Med Chi opposed the legislation, and the chairperson of this committee testified in Annapolis before the House Environmental Matters Committee on February 24, 1993. The chairperson stressed Med Chi's efforts in this area, and informed the Environmental Matters Committee of Med Chi's position and its endeavor to set up a standing committee to address self-referral problems. The legislation passed despite Med Chi's opposition to a law that increased health care costs, limited accessibility, interfered with the physician/patient relationship, and placed unnecessary regulatory burden upon a health care system already drowning in regulatory paperwork and administrative hassles.

As a result of the committee's recommendation to establish a standing committee, the members of the ad hoc committee were asked to continue their membership on the Ad Hoc Proactive Committee on Self-Referral. In addition, a bylaw change was submitted to the Bylaws Committee recommending that the self-referral committee become a standing committee.

Committee members

Chairperson Paul A. Stagg, M.D.
Brian S. Bayly, M.D.
Harold B. Bob, M.D.
J. Ramsay Farah, M.D.
Carol W. Garvey, M.D.
Frederick J. Hatem, M.D.
Lawrence E. Holder, M.D.
Allan D. Jensen, M.D.
Allan T. Leffler II, M.D.
Arnold G. Levy, M.D.
Jose Martinez, M.D.
Paul E. Pritchett, M.D.
William B. Radcliffe, M.D.
Bruce E. Rubin, M.D.
Howard M. Silby, M.D.
Jack M. Zimmerman, M.D.

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Ad Hoc Proactive Committee on Self-Referral

Mr. President and Members of the House of Delegates:

The Ad Hoc Proactive Commitee on Self-Referral was formed in February 1993 with members from the Ad Hoc Committee on Self-Referral. The charge to the new committee was

> An Ad Hoc Proactive Committee on Self-Referral shall be appointed by the president, who will give primary consideration to those members who served on the 1992 Ad Hoc Committee on Self-Referral. The committee shall utilize self-referral guidelines of the AMA Council on Ethical and Judicial Affairs to review and analyze specific situations. The committee shall be authorized to receive inquiries from physicians requesting whether an arrangement meets the AMA guidelines. The committee may review, as necessary, any complaints wherein there is an allegation of inappropriate physician self-referral. The committee shall determine the mechanism for conducting its business and the matter by which self-referral situations may be referred to the committee.

The purpose of the committee's initial meeting was to conduct a brainstorming session to determine how the committee would function. Members reviewed information on medical review committees, Report C of the Council on Ethical and Judicial Affairs (CEJA) of the American Medical Association (AMA), current law regarding patient referrals, and articles addressing self-referral and federal initiatives.

The committee decided it should be a medical review committee as defined in the Maryland Medical Practice Act, Health Occupations Article, Section 14-501. The criteria for review would be those identified in Resolution 4—approved by the AMA House of Delegates on December 8, 1992—which reaffirms CEJA's Report C, "Conflicts of Interest: Physician Ownership of Medical Facilities" (Policy 140.961) and requests that CEJA continue to study and revise these guidelines as changes in the health care system may require. The guidelines adopted by the committee are

- ✦ In general, physicians should not refer patients to a health care facility outside their office practice at which they do not provide care or services directly if they have an investment interest in the facility.
- ✦ Physicians may invest in, and refer to, an outside facility "...if there is a demonstrated need in the community for the facility and alternative financing is not available." A list of 10 criteria may be used to support this exception.

The committee further determined that self-referral situations from two sources would be reviewed: (1) complaints referred to the committee by the Board of Physician Quality Assurance (BPQA) and (2) requests for review by physicians or health service entities in operation or planning a new venture. The committee's opinion would be provided to the requesting physician for appropriate use and, in the case of a complaint, to the BPQA for action under the category of an ethical issue (unprofessional conduct).

After extensive deliberation, the committee recommended that Med Chi explore the feasibility of amending current legislation to provide that BPQA refer complaints regarding self-referral to Med Chi's self-referral committee.

Committee members

Chairperson Paul A. Stagg, M.D.
Brian S. Bayly, M.D.
Harold B. Bob, M.D.
Robert J. Cirincione, M.D.
J. Ramsay Farah, M.D.
Carol W. Garvey, M.D.
Frederick J. Hatem, M.D.
Lawrence E. Holder, M.D.
Allan D. Jensen, M.D.
Allan T. Leffler, M.D.
Arnold G. Levy, M.D.
Jose Martinez, M.D.
Paul E. Pritchett, M.D.
Bruce E. Rubin, M.D.
Jack M. Zimmerman, M.D.

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Committee on Specialist Identification

Mr. President and Members of the House of Delegates:

The Committee on Specialist Identification held four meetings this past year to implement the mandated specialist identification authority of the Board of Physician Quality Assurance (BPQA). This committee functions as the BPQA reviewing body on applications received from physicians requesting designation in a particular medical specialty.

Application for specialty designation is open to all licensed physicians in Maryland. If a physician is certified by the American Board of Medical Specialists, the identification is automatically given by the BPQA upon confirmation of that credential. If not certified by the American Board of Medical Specialists, the physician must complete an application outlining specific training and experience in the particular specialty.

Applications are referred by the BPQA to this committee for evaluation. Evaluation criteria were developed jointly by Med Chi and the BPQA and are set forth in administrative regulations (COMAR 10.32.08) having the force and effect of law. The BPQA makes the final decision on the basis of the committee's recommendation. The identification is permanent, and the physician may publicize himself or herself in the given area of specialty.

Much time and effort has been exerted in reviewing the 2,917 applications received thus far. Of the applications reviewed, the committee has recommended that 298 be denied. Each application is reviewed thoroughly, fairly, and in strict compliance with the required criteria. As chairperson, I wish to thank committee members for their patience in carrying out this mandated function.

Committee members

Chairperson Samuel D. Friedel, M.D.
William A. Crawley, M.D.
Deusdedit Jolbitado, M.D.
Donald W. Kress, M.D.
Juanito F. Lopez, M.D.
B. Martin Middleton, M.D.
Hiroshi Nakazawa, M.D.
Arthur W. Sagoskin, M.D.

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Committee on Specialty Societies

Mr. President and Members of the House of Delegates:

The Committee on Specialty Societies is composed of representatives from various Maryland specialty societies as chosen by the Med Chi president. The committee is charged with reviewing issues concerning interdisciplinary and multidisciplinary problem areas of medical practice as related to each specialty. The committee provides specialty representation to the Med Chi Council and House of Delegates.

During the 1992-1993 year, the committee held three meetings at which the following issues were raised. The committee continued to address membership criteria for the Committee on Specialty Societies. This is an ongoing issue that was discussed at the May 1993 meeting of the Med Chi House of Delegates and will continue as an agenda item for the committee during the 1993-1994 year.

The committee reviewed two publications. The first was the newsletter of the Committee on Therapeutic Education—*EQUAL=TIME*—dealing with metered dose inhalers and nonsteroidal anti-inflammatory drugs.

The committee also spent a good deal of time reviewing a draft publication entitled *Medical Treatment Never Includes Sexual Contact.* The committee was informed that the idea for the publication was presented to Council by the Committee on Physician Rehabilitation in 1991. Council recommended that the Peer Review Management Committee, the Committee on Specialty Societies, and the Committee on Mental Health, along with the Maryland Psychiatric Society, review the publication and return with a recommendation for Council discussion and action. All aforementioned committees reviewed the publication and recommended publication.

Much of the discussion by the Committee on Specialty Societies was in opposition to publishing and distributing the proposed pamphlet. Many committee members expressed feelings that the pamphlet was inflammatory. There was also strong objection to distributing the pamphlet to patients and to language in the resources section of the pamphlet that stated, "You may also seek counsel from your personal attorney."

Some discussion ensued regarding reformatting the information into more of a Med Chi policy statement for physicians only. The committee was informed that HB 389, passed and signed into law, would create a task force to study health care provider–client sexual exploitation.

Throughout the year, the committee was kept abreast of a number of Med Chi activities presented before Council. These included the discussion on the hiring of a lobbyist and the discussion of the pamphlet, *Medical Treatment Never Includes Sexual Contact.*

Committee members

Chairperson Daniel E. Kohn, M.D.
Matthew J. Brennan, M.D.
Paul Bormel, M.D.
James Castellano, M.D.
William A. Crawley, M.D.
Laurence Desi, Sr., M.D.
Jay Gerstenblith, M.D.
Edward J. Goldman, M.D.
Theodore E. Harrison, M.D.
Arthur M. Hildreth, M.D.
Iredell W. Iglehart III, MD
Charles J. Lancelotta, M.D.
Kenneth B. Lewis, M.D.
Joshua R. Mitchell, MD
David C. Moses, M.D.
Lawrence C. Pakula, M.D.
Andrew V. Panagos, M.D.
Donald I. Saltzman, M.D.
Steven A. Schonfeld, M.D.
Alberto C. Seiguer, M.D.
John A. Singer, M.D.
John W. Skouge, M.D.
Allan P. Weksberg, M.D.
Richard B. Williams, M.D.

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Sports Medicine Subcommittee

Mr. President and Members of the House of Delegates:

The Sports Medicine Subcommittee was reactivated during the 1992-1993 year with seven new members. One of the first issues the subcommittee addressed was a sports physical examination checklist that had been promulgated by the Maryland Chapter, American Academy of Pediatrics (AAP). The subcommittee found the evaluation form more than adequate for performing sports evaluations and relayed this information to the Maryland Chapter, AAP. This review led the subcommittee to query Maryland school systems to determine the type of forms required for sports evaluations. While each school system asked similar questions, the length and depth of the sports evaluations varied. Therefore, the subcommittee is investigating the feasibility of a uniform sports evaluation form.

The Committee on Public Health requested the subcommittee to address the issue of a physical fitness project in schools. In response to this directive, the subcommittee reviewed a number of wellness programs in operation in several school systems, school physical fitness programs, and fitness programs promulgated by the Boy Scouts and Girl Scouts. The extensiveness of the programs varied, as well as the programs' focus and the age groups targeted. Discussion of this initiative continues.

In response to a request from the Committee on Medicine and the Performing Arts, David L. Kreisberg, M.D., gave a presentation entitled "Conditioning and Physical Fitness for Performers: The Performer as an Athlete."

The subcommittee looks forward to expanding its activities next year. It plans to work cooperatively with component medical societies on various projects.

Committee members

Chairperson David L. Kreisberg, M.D.
Neil J. Barkin, M.D.
Robert W. Bright, M.D.
John C. Gordon, M.D.
Edward G. McFarland, M.D.
Lewis McIntyre, M.D.
Gary W. Pushkin, M.D.
Myron J. Szczukowski, M.D.

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Committee on Therapeutic Education

Mr. President and Members of the House of Delegates:

The former Ad Hoc Therapeutic and Formulary Committee was established as a standing committee by action of the House of Delegates on May 2, 1992. This action was a result of the House of Delegates adopting the recommendation of the By-laws Committee to change the committee's name to reflect the educational focus of the committee and to establish it as a standing committee.

The purpose of the renamed Committee on Therapeutic Education shall be to develop informational and educational programs for physicians regarding effective and cost-efficient prescribing practices. The committee will aid the Medical Assistance program in analyzing the effectiveness of "therapeutic formularies" and endeavor to ensure that any preauthorization mechanism is acceptable to Med Chi. The committee may cooperate with and invite government and private agencies working in the pharmaceutical field and invite the attendance of physician and nonphysician members of such agencies to work with the committee on a nonvoting basis.

With approval from the Executive Committee, the Committee on Therapeutic Education designed a therapeutic drug use newsletter for distribution to physicians providing care for Medicaid patients. The newsletter is entitled *EQUAL=TIME, Prescribing with the WHOLE Story*. Members of the committee reviewed and approved the dissemination of *EQUAL=TIME* newsletters on metered-dose inhalers and nonsteroidal anti-inflammatory drugs.

A number of activities are planned for the 1993-1994 year. One is the discussion of cough/cold products and compounded prescriptions.

Committee members

Chairperson Richard M. Susel, M.D.
Louis C. Breschi, M.D.
Ronald Goldner, M.D.
James C. Kleeman, M.D.
John O. Meyerhoff, M.D.
Joshua R. Mitchell III, M.D.
Robert Rudermnan, M.D.
Gita K. Shah, M.D.

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Women in Medicine Committee

Mr. President and Members of the House of Delegates:

During the 1992-1993 year, the Women in Medicine Committee encouraged the participation of women physicians in Med Chi. The committee also worked to promote women's health issues.

In an effort to ensure that women physicians feel welcome in the organized medicine family, the committee initiated action on special gender issues affecting women physicians—family leave policy and language neutrality. Because the committee thought that women physicians who are planning to have a family may often feel discriminated against, the committee presented a family leave resolution to Council, and the following policy was adopted:

> *Resolved,* That the policy of the Medical and Chirurgical Faculty of Maryland reflect the need of physicians to take family leave and to encourage the medical community to support the concept of family leave for both male and female physicians.

Because gender-biased language continues to exist in medicine and may cause women physicians to feel unwelcomed, the committee recommended that Med Chi adopt a policy of gender-neutral language and incorporate it in all official written and verbal communications, using the American Medical Association (AMA) Board of Trustees Report K (A-92) as a guideline. This recommendation was passed by Council and has been incorporated into all aspects of Med Chi communications.

The committee also provided women physicians an opportunity to meet new colleagues by initiating a Women in Medicine Month brunch, the first of which was held on Sunday, September 27, 1992. The AMA encourages state and local medical societies to recognize September as Women in Medicine Month. The brunch was set-up as an informal discussion and allowed physicians to discuss issues faced by women in medicine. All female Med Chi members were invited and encouraged to bring spouses and nonmember women physicians. There were 31 attendees at the brunch, which the committee plans to make an annual event.

In an effort to provide education to the membership on women's health issues, the committee sponsored a presentation at the 1993 Med Chi annual meeting entitled "Estrogen Use

and Coronary Artery Disease in Women." Trudy Bush, Ph.D., M.H.S., associate professor, Department of Epidemiology, the Johns Hopkins University School of Hygiene and Public Health, discussed the correlation between coronary artery disease and estrogen use in women.

The committee also continues to support Maryland Elder C.A.R.E., a Med Chi membership benefit providing planning assistance for the complex needs and responsibilities of elderly relatives. A representative from Maryland Elder C.A.R.E. staffed a booth at the 1993 annual meeting to explain the program's benefits to Med Chi members.

The members of the committee thank Med Chi for the opportunity of serving on this committee. We welcome any comments or suggestions for future activities from all physicians.

Committee members

Chairperson Randy Sue Ellis, M.D.
Marianne Benkert, M.D.
Joyce M. Boyd, M.D.
Susan Ferrand, M.D.
Susan R. Guarnieri, M.D.
Bridget C. Kahntroff, M.D.
Susan W. Owens, M.D.
Mahin Shamszad, M.D.
Beverly J. Stump, M.D.
Rhodora C. Tumanon, M.D.

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Committee on Young Physicians

Mr. President and Members of the House of Delegates:

The 1992-1993 year prompted reorganization of the Committee on Young Physicians under the leadership of Mehrdad (Mike) Massumi, M.D. who spearheaded an initiative to provide programs of interest to young physicians. The committee's first venture into this area consisted of reviewing areas of interest to young physicians: managed care, public relations, accounting, purchasing, billing and collections, marketing, and legal issues.

To begin this endeavor, the committee met with Scott Weber, Medical Communications Network, to solicit support and expertise for this undertaking. As a result, Medical Communications Network sponsored a practice management luncheon for young physicians at Med Chi's 1992 annual meeting in College Park. The luncheon presentation was entitled "Practice Management Strategies for Young Physicians."

Another initiative discussed was arranging for two or three speakers to go into hospitals to address young physicians on how to set up a practice. Efforts in this area will continue in the coming year.

The chairperson, who has been a member of the American Medical Association (AMA) Young Physicians Section for three years, presented the Young Physicians Section report of the AMA Interim Meeting. Highlights of the meeting centered on the following topics:

- ✦ Young physician exclusion from managed care networks;
- ✦ Economic credentialing by insurance companies;
- ✦ Medicare new physician disparities;
- ✦ Emergency preparedness for natural disasters;
- ✦ Providing health care directive information to Medicare/Medicaid beneficiaries;
- ✦ Mainstreaming of the young physician section into the AMA;
- ✦ Ethical treatment of young physicians;
- ✦ Primary health manpower needs; and
- ✦ Young physician position on the AMA Board of Trustees.

It was noted that Med Chi currently supports the participation of a young physician at AMA meetings. This provides a young physician an opportunity to participate in fundamental discussions about timely and critical matters related to the societal, political, and financial well-being of young physicians.

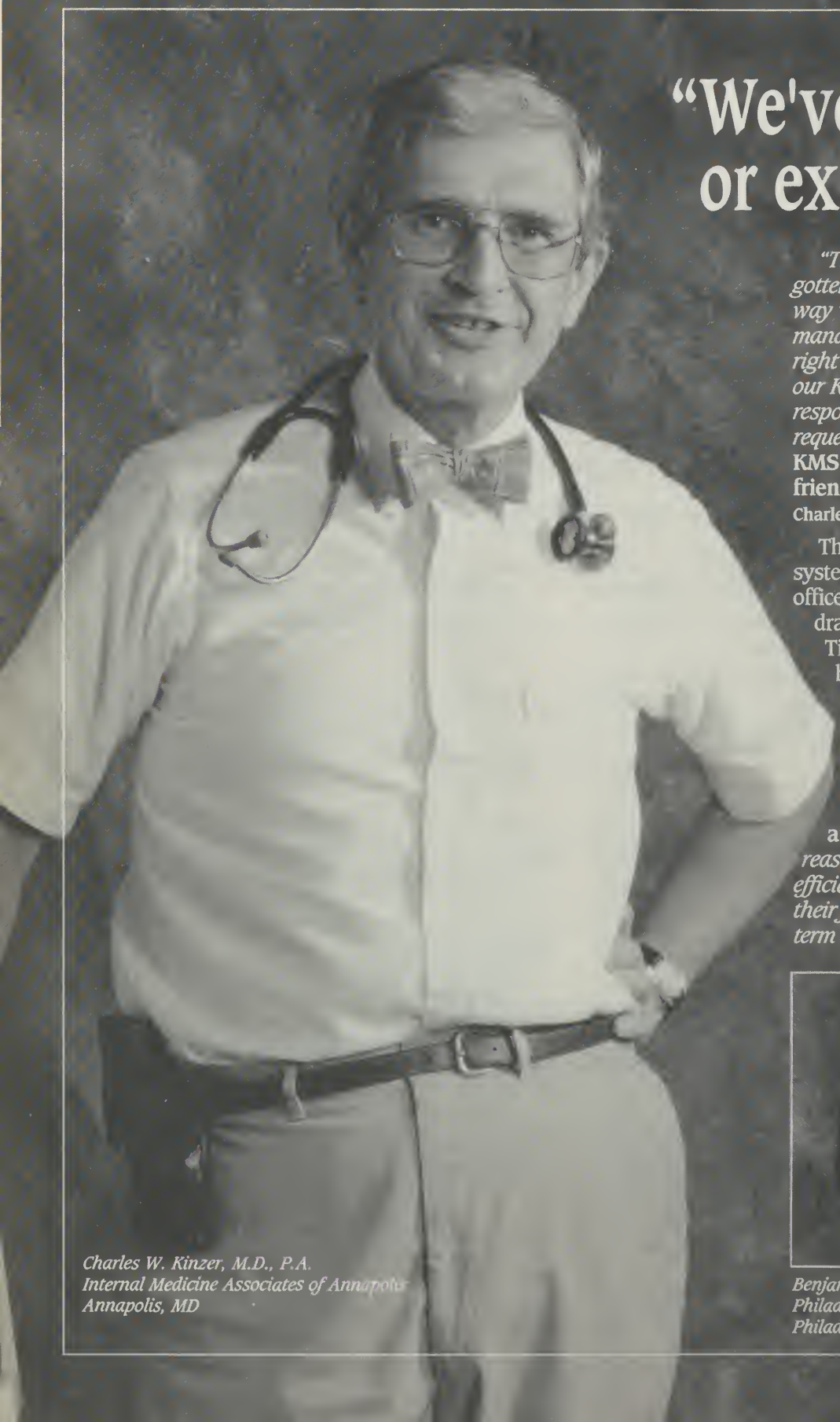
The committee discussed and reviewed the AMA *Health Care Reform 1993 Campaign Action Kit.* This kit provided an excellent workbook for physicians and presented information about writing to legislators on the issue of health system reform.

In the coming year, the committee hopes to focus on young physician recruitment. It also plans to offer seminars that will benefit young physicians.

Committee members

Chairperson Mehrdad (Mike) Massumi, M.D.
Nicholas Dudas, M.D.
James P. Richardson, M.D.
Howard L. Siegel, M.D.

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Charles W. Kinzer, M.D., P.A.
Internal Medicine Associates of Annapolis
Annapolis, MD

Benjamin L. Levin, Executive Director
Philadelphia Eye Associates
Philadelphia, PA

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systems and realize we can't grow—our computer from Keystone."



Carol Matthews, President
Lebanon Medical Management, Inc.
Lebanon, PA

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Paul J. Killian, M.D.



Paul J. Killian, M.D.
Mary Spece, Office Manager
Arthritis And Rheumatic Disease Associates
Pittsburgh, PA



Cindy Groux, President
Health Care Practice Management
Wilmington, DE

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AMA-ERF

Mr. President and Members of the House of Delegates:

It is with much pleasure that I offer this report of Med Chi members' contributions for the year 1992-1993 to our one and only philanthropy—the American Medical Association Education and Research Foundation—better known as AMA-ERF.

This program is unique in that it is solely designed to lend a measure of financial support to Maryland medical schools. These flexible funds aid the schools in their continued efforts toward achieving a goal of medical excellence.

Med Chi members have responded loyally and generously, for which I extend a sincere and heartwarming thank you. Looking forward, I am hopeful that new, incoming Med Chi members will lend their support to this program so that AMA-ERF will continue to survive and thrive.

Let me offer my sincere thanks to President Jose Yosuico, M.D., for affording me the great privilege of serving as state AMA-ERF chairperson for Med Chi during his tenure in office. And, to the competent and capable Med Chi staff, I am most appreciative of all of the kindness and consideration I have received during the past year. Thank you so much.

Faculty contributions
June 1, 1992-April 30, 1993

Allegany County	$620.00
Anne Arundel County	1,460.00
Baltimore City	4,060.00
Baltimore County	4,000.00
Calvert County	120.00
Caroline County	-
Carroll County	280.00
Cecil County	100.00
Charles County	200.00
Dorchester County	60.00
Frederick County	520.00
Garrett County	60.00
Harford County	780.00
Howard County	560.00
Kent County	80.00
Montgomery County	5,460.00
Prince George's County	2,580.00
Queen Anne's County	-
St. Mary's County	60.00
Somerset County	20.00
Talbot County	520.00
Washington County	920.00
Wicomico County	760.00
Worcester County	20.00
Members-at-large	20.00
Total	$23,260.00

Maryland physicians' direct contributions
1992-1993

$6,820.00

Chairperson Elizabeth A. Linhardt

Auxiliary

Mr. President and Members of the House of Delegates:

The 1992-1993 Med Chi State Auxiliary year commenced with the auxiliary president, Mrs. Myrna Goodman, traveling to various counties to install new auxiliary officers. (It was nice to meet new faces and see auxiliary friends from across the state. The hard work they put into their community health projects is appreciated. The diversity in backgrounds and talents makes the Med Chi State Auxiliary a special organization.)

At the national auxiliary annual convention in Chicago, Mrs. Myrna Goodman was presented as Maryland's state auxiliary president along with other state presidents from across the country. It was an impressive ceremony attended by more than 700 delegates and guests. Mrs. Goodman's husband Stuart, son Jacob, and six Marylanders witnessed the event. It was the 70th anniversary for the American Medical Association Auxiliary (AMAA), and the 40th year for Hazel Lewis, the AMAA executive director.

The proposed name change from American Medical Association **Auxiliary** to American Medical Association **Alliance**, with the tag line, "Physician spouses dedicated to the health of America," was presented to the AMAA House of Delegates. An immediate ballot vote was called. The resolution passed, effective June 1993. Each state must now make a decision as to whether to change the name of its state organization from auxiliary to alliance.

The state auxiliary president attended the Fall Confluence along with three other Maryland auxilians. In November, Myrna Goodman held, in her home, a confluence overview that was open to all auxilians. Confluence attendees shared what they had learned at the Chicago meeting.

"Awareness is Prevention" was the state auxiliary's health motto for the year. Breast cancer awareness and the prevention of violence were specifically addressed. At the auxiliary's fall House of Delegates meeting, the auxiliary sponsored a speaker from the Life Crisis Center in Salisbury, which offers help to victims of domestic violence. Auxilian Karen Mausner gave a second, well-received self-defense seminar.

A statewide campaign was undertaken to put up billboards stating "One in Nine—Mammography. Your Best Weapon." Med Chi sponsored the first two billboards, which were displayed on Route 50 in September. The billboards were visible to those attending the Med Chi semiannual meeting in Ocean City. County medical societies also displayed billboards in conspicuous places.

Four membership/treasurer workshops were held early in the fall. They were coordinated by Mrs. Pat Thompson and Mrs. Madrian Snyder.

At the auxiliary's winter board meeting, a reconstructive surgeon spoke on the various options one can elect after mastectomy. Darlene Young, AMAA field director, gave an informative membership workshop.

On March 29, 1993, the auxiliary received a proclamation certificate, signed by Governor Schaefer, designating March 30 as Doctors' Day; March 30 is also National Doctors' Day. (The self-defense seminar for caregivers scheduled for March 31 in honor of Doctors' Day was postponed indefinitely.)

At the annual convention, a presentation on domestic violence was offered on April 29, 1993, and on May 1, a presentation on breast cancer prevention. As the culmination to the auxiliary's breast cancer prevention efforts, free mammograms for over 30 indigent women were performed in May with the aid of the University of Maryland mobile van. Special thanks go to Adriana Zarbin and the Baltimore City Auxiliary for the $2,000 donation.

The auxiliary continues to maintain a good rapport with Med Chi members and staff. Dr. Jose Yosuico, Med Chi president, and Angelo Troisi, executive director, were instrumental in making it possible for the auxiliary to receive the Governor's Citation Award for the auxiliary's legislative work. Myrna Goodman accepted this award on behalf of the auxiliary at Med Chi's semiannual meeting in Ocean City.

Also at the semiannual meeting, MMPAC Chairperson John Lynn, M.D., spoke to auxiliary members about political action pertaining to health care issues and its importance in the legislative process. In mid-January, the auxiliary had a successful legislative day in Annapolis. President Goodman attended a Legislative Induction Ball of the Prince George's County Medical Society in late January. On March 18, physicians and spouses went to Annapolis for a media rally to express concerns about various proposals including HB 1359; this bill to cap physicians' fees was amended.

The auxiliary president participated in the Charles County Medical Society summer business meeting at Andrews Air Force Base and installed the auxiliary officers. Med Chi's Eastern Shore meeting was held in Cambridge, and Mildred Taylor represented the auxiliary. Myrna Goodman represented the auxiliary at the President's Southern Regional Meeting held in Solomon's Island on April 1; she gave an update on auxiliary activities.

The annual state auxiliary convention was held at the University of Maryland in College Park on April 29 and 30. Priscilla Gerber, AMAA president, installed the new officers. Mildred Taylor, president-elect for the Southern Medical

Association Auxiliary (SMAA), spoke about the SMAA. The auxiliary's annual meeting finale was the singing of "Heal the World," led by Lori Snyder, for Lee Snyder, founding member of the Physicians' Children Volunteer Corps; Jacob Goodman and Chancellor Blair also helped lead in this song. At the luncheon, which was attended by around 90 auxilians and guests, Dr. Joseph Snyder, Med Chi president-elect, presented certificates of appreciation to Priscilla Gerber, Mildred Taylor, and Myrna Goodman. At the House of Delegates meeting on May 1, Mrs. Goodman gave an auxiliary update and accepted another certificate of appreciation on behalf of the state auxiliary for having had a great year.

Myrna Goodman went to Chicago to present the year-end report. Georgia Lizas, Adriana Zarbin, Mildred Taylor, Naomi Klein, and Jo Ann Troisi traveled with her.

President Goodman gave a thank-you luncheon at her home on June 3. Helen Boyer, the auxiliary parliamentarian for years, shared her wisdom pertaining to parliamentary procedures, job descriptions of officers and chairpersons, and responsibilities of delegates to the AMAA convention. Socks for the elderly and needy of the PVNC Nursing Home were generously donated by fellow auxilians—Mrs. Goodman's optional request for the nursing home where she volunteers.

As auxiliary president, I offer my profoundest thanks to all auxiliary board members for their outstanding work this past year; many willingly went above and beyond the call of duty. I wish to extend my appreciation to Drs. Yosuico and Snyder and to Med Chi members and staff, particularly Executive Director Troisi, for their support and help. Many thanks as well to the auxiliary's very own Jo Ann Troisi for serving as a guiding light and for being a dear friend. To many of my friends and colleagues within the auxiliary, I extend my gratitude for your endless energy and devotion to auxiliary activities this past year. To Pat Thompson and Madrian Snyder, many thanks for conducting the four membership/treasurer workshops. To Georgia Lizas, many thanks for your support. To Georgine Welty and Elizabeth Linhardt, my deepest appreciation for your inspiring longevity and dedication to the auxiliary. To Mary Strauss for conducting another successful annual meeting auction for the AMA-ERF (American Medical Association Education and Research Foundation) and for providing a lot of fun and laughter—many thanks.

Last but not least, my endless thanks to my better half, Stuart, "the wind beneath my wings," for his friendship, love, and support, and for believing in me. To Jacob, my huggable son, thanks for taking my absences from home as opportunities to do and get "anything he wishes." No! I will not slow down. I will continue to make a difference. Together we will communicate, educate, and legislate to help "make a better place for the entire human race."

State Auxiliary President Myrna Goodman, R.N.

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Mildred Taylor; Priscilla Gerber, AMA Auxiliary president; Myrna Goodman; and Elizabeth Linhardt participate in the 44th annual meeting of the Med Chi Auxiliary.

Executive Director

Mr. President and Members of the House of Delegates:

The 1992-1993 year brought a newly defined focus to the profession of medicine. Med Chi found that the intensified attention to health system reform raised questions from patients, insurers, legislators, and physicians alike. Through legislative and educational efforts, Med Chi faced the current issues with support from its officers and members. This report highlights the past year's accomplishments.

1993 legislative session

The 1993 legislative session provided many challenges for Med Chi. A very active legislative team was created and, by way of a newsletter, *Legislative Action*, kept Med Chi members informed of events in Annapolis. More than 8,400 copies of this weekly publication were mailed to the Med Chi and component societies leadership. On March 18, 1993, more than 100 physicians attended the Med Chi legislative rally in Annapolis to express their views regarding health system reform and other legislative issues. House Bill 1359, Maryland's Health Care and Insurance Reform Bill, was of greatest concern this year, but Med Chi physicians and staff worked diligently on many important health care issues. For a detailed account of the 1993 legislative session, see the Legislative Committee report.

Anti-smoking campaign

Med Chi initiated an innovative anti-smoking campaign to assist physicians in warning patients about the dangers of smoking. The campaign began with the development of an educational program entitled "How to Help Your Patients Stop Smoking."

It was enhanced this year by the broadcast of an anti-smoking public service announcement on local television stations and the production of a warning label targeting the advertising of tobacco products. The tobacco warning labels were distributed to physicians starting in January 1993. The labels were to be placed on physicians' waiting room magazines containing tobacco advertising. The labels contained the following message: "Warning: This magazine contains cigarette advertisements. Your physician does not support the use of any tobacco products or advertising of such products." The campaign received recognition and praise from the American Medical Association (AMA) and attracted the attention of many other state medical societies.

Med Chi also undertook another anti-smoking effort. Maryland legislators and their office staff were invited to attend a special session of "How to Stop Smoking" on March 24, 1993, at the Maryland Inn in Annapolis.

Responding to Maryland's budget cuts

Late in 1992, Maryland was forced to cut $50.2 million from the state's medical assistance programs for the poor. It was estimated that 30,000 of the state's Medicaid clients who did not qualify for federal aid would not receive health care benefits. In addition, local health departments were slated to lose $15.1 million. Med Chi worked with the Maryland Association of County Health Officers (MACHO) and the Department of Health and Mental Hygiene (DHMH) to meet the needs of Medicaid recipients.

Med Chi Council passed a resolution encouraging component medical societies to work with county and city health departments to provide volunteer physicians for needed medical services that would no longer be available. Med Chi also encouraged Governor William Donald Schaefer to restore funds to the local health departments.

Membership survey

Med Chi surveyed over 1,800 Med Chi physicians in August to ascertain their attitudes about membership benefits, various health care issues, and physician practice pattern issues. A total of 899 physicians responded to the survey—a 51% response rate. Questionnaires were returned by physicians in every Maryland county.

New policy on gender-neutral language

On November 19, 1992, Med Chi Council adopted a policy of incorporating gender-neutral language into all written and verbal communications. The new policy was adopted because Med Chi recognizes and encourages contributions from women physicians and is committed to eliminating gender-related barriers. The new policy is based on the AMA Board of Trustees Report K (A-92) that, in summary, recommends

- That the AMA adopt a policy of gender-neutral language, to be incorporated into its bylaws, policies, procedures, and publications during the normal process of printing and updating/reprinting documents.
- That the term "chairman" no longer be used to designate the head of a committee, and that the term "chair" or "chairperson" be used instead.

- That the AMA encourage state, county, and national medical and specialty societies to review their bylaws and policies and eliminate gender-biased language where it exists.

Blue Cross and Blue Shield

Three top executives from Blue Cross and Blue Shield of Maryland (BCBSM), Frank A. Gunther, Jr., chairperson of the board; William Beasman, acting chief executive officer; and Arthur T. Keefe, Jr., M.D., executive vice-president and medical director, met with Med Chi physicians on February 24, 1993, to discuss physician concerns regarding BCBSM. Following that meeting, Med Chi physicians were updated on the situation at BCBSM through a regular feature in the *Maryland Medical Journal.*

Annual meeting

The 1993 annual meeting was held April 29, 1993, through May 1, 1993, at the University of Maryland University College Conference Center, College Park, Maryland. Raymond Scalettar, M.D., chairperson of the AMA Board of Trustees was a special guest at a forum on health system reform. This forum, which addressed the state initiative, HB 1359, as well as federal initiatives, included the Honorable Casper R. Taylor, Jr., chairperson of the House Economic Matters Committee, Maryland House of Delegates, and the Honorable Gary R. Alexander, vice-chairperson of the House Economic Matters Committee, Maryland House of Delegates.

Also at the annual meeting was a special session on mustard gas disposal entitled "Clearing the Air About Poisonous Gas." The program was coordinated by the Maryland Chapter, American College of Emergency Physicians, and was presented by the Centers for Disease Control and Prevention.

Semiannual meeting

The 1992 semiannual meeting was held September 18, 1992, through September 20, 1992, at the Princess Royale Hotel, Ocean City, Maryland. Another forum on health system reform at the state and federal levels was held as the plenary session. Joseph Painter, M.D., president-elect of the American Medical Association, provided the keynote address.

Special conferences

Two president's regional conferences were held to keep open the lines of communication with Maryland's outlying areas. One was held in western Maryland on Thursday, October 22, 1992, at the Sheraton in Hagerstown. A second conference was held on the Eastern Shore on Thursday, November 5, 1992, at the Cambridge Yacht Club in Cambridge.

The Physician Rehabilitation Program sponsored a conference, "Third Annual Conference on Addiction: Physician Health and Education." It was held on Saturday, November 21, 1992, at Med Chi.

The Committee on Medicine and the Performing Arts conducted a conference on the special problems of performing artists, "Performing Arts Medicine II: Focus on Young Performers." The program was held March 20-21, 1993, at Med Chi.

Med Chi sponsored training sessions to help physicians and their office staff comply with federal regulations on occupational exposure to bloodborne pathogens. More than 500 physicians and their office staff benefited from these sessions.

In addition, there were seminars on the processing of the new Health Care Financing Administration (HCFA) 1500 claim form and updates on HCFA's Medicare fee schedule changes. Continual updates on the Clinical Laboratory Information Act (CLIA) changes were also provided.

On behalf of the staff of Med Chi, I would like to thank Med Chi members for all their contributions during the 1992-1993 year. We look forward to working with you in 1993-1994.

Executive Director Angelo J. Troisi, FACHE

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The Maryland Medical Political Action Committee

Mr. President and Members of the House of Delegates:

The Maryland Medical Political Action Committee (MMPAC) met only twice during 1992, but the MMPAC Executive Committee held several conference calls to discuss contributions to political fund-raisers. The annual physicians' day in Annapolis was well attended and gave physicians the opportunity to speak to individual legislators about important health care legislation.

MMPAC held elections for its Executive Committee. The following individuals will serve a two-year term:

- Chairperson Frederick J. Hatem, M.D.
- Immediate Past Chairperson John T. Lynn, M.D.
- Vice-Chairperson Hillary T. O'Herlihy, M.D.
- Treasurer Jose M. Yosuico, M.D.
- Secretary Hiroshi Nakazawa, M.D.
- Member-at-Large Joseph Snyder, M.D.
- Member-at-Large J. Richard Lilly, M.D.

Angelo Troisi will serve as advisor to the MMPAC Executive Committee and the MMPAC Board of Directors. Both the

smaller components and the four larger Med Chi components are represented on the MMPAC Executive Committee.

The purpose of MMPAC, as stated in MMPAC's bylaws under Article II, Sections 2, 3, and 4, is as follows:

> **Section 2.** To encourage its members to understand the nature and actions of their government; to inform them of important legislation and political issues affecting the medical profession; to present to its members the record of office holders and candidates for elective office.
>
> **Section 3.** To assist its members in organizing themselves for effective political activity and civic responsibility.
>
> **Section 4.** To lend support to and work for the nomination and election of any candidate for public office representing the best interests of the public and medicine's viewpoint.

Every physician should be aware of the legislative process at the state and federal levels. This was highlighted during the 1993 Maryland legislative session and by the publicity surrounding the health system reform activities of the Clinton administration.

To this end, every physician should be an MMPAC member. MMPAC should use its resources not only for financial contributions to candidates, but in working with component societies to gather information about candidates and to provide components with information obtained from resources of a statewide organization.

Med Chi staff are assembling complete voting records of state legislature members, as well as other information that will help MMPAC determine the extent of support it should provide. MMPAC works with all components to provide information and elicit input; working together allows MMPAC to achieve the purpose for which it was organized.

During the 1993 legislative session, the importance of good communication between legislator and medicine was obvious. MMPAC needs the support of each Maryland physician. Please join those who already are involved with their money and talents.

Because of changes in congressional districts, MMPAC is in the process of reorganizing its board of directors and is considering possible changes to its bylaws. With 1994 being an important election year, MMPAC would like to maximize its resources for efficient operation and successful undertakings.

The next meeting of MMPAC will be held in September 1993 during the Med Chi semiannual meeting in Ocean City. We hope to see you there.

Committee members

Chairperson Frederick J. Hatem, M.D.
Jeffrey A. Abend, M.D.
Thomas E. Allen, M.D.
Brian S. Bayly, M.D.
Marianne Benkert, M.D.
Bessie Blair
Harold B. Bob, M.D.
John W. Clark, M.D.
Josie Figueroa
Bernard S. Kleiman, M.D.
Henry P. Laughlin, M.D., Sc.D., Sc.S.D.
Donald T. Lewers, M.D.
Mayer C. Liebman, M.D.
Vivian Lynn
George S. Malouf, Sr., M.D.
J. David Nagel, M.D.
Hiroshi Noakazawa, M.D.
Hillary T. O'Herlihy, M.D.
Gary L. Rosenberg, M.D.
Sue Sherwood
Roland T Smoot, M.D.
Catherine M. Smoot-Haselnus, M.D.
Lawrence R. Whicker, Jr., M.D.
Jose M. Yosuico, M.D.

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Med Chi Insurance Fund

Mr. President and Members of the House of Delegates:

The Med Chi Insurance Fund Committee and Board of Directors met five times during 1992 to carry out its responsibilities for the Med Chi Insurance Fund and the Med Chi Agency. The Med Chi Agency continued its new business growth, and expanded its staff to accommodate additional opportunities in the disability and life insurance sectors of the operation. All lines of insurance are currently offered and available to members, including estate and financial planning services.

The board approved a new Blue Cross/Blue Shield plan option effective September 1, 1992, bringing the total number of plan options to four. In addition, participants within the other three options can transfer to the new Option 4 without medical underwriting during open enrollment each September. The Med Chi Agency also offers alternative health plans for members who elect not to participate in the Blue Cross/Blue Shield Association group plans.

The board reviewed the appropriate financial statements and claim report statistics with company representatives. As a result of this review, the board approved a 20% premium increase for the Hartford major medical plan.

The client base of the Med Chi Agency increased in property and casualty and in professional liability with the Medical Mutual Liability Insurance Society of Maryland (Med Mutual). Commission income is projected to decline in 1993 due to special discounts and tail buy-backs offered to Medical Mutual policyholders.

The Med Chi Agency had a very successful year and membership has benefited as a result. The board is appreciative of members' ongoing support and will strive diligently to offer the highest quality, financially stable, and competitively priced products and services for Med Chi members.

Committee members

Chairperson Allan D. Jensen, M.D.
Albert L. Blumberg, M.D.
Michael R. Dobridge, M.D.
Allan T. Leffler, M.D.
George S. Malouf, Sr., M.D.
Francis C. Mayle, Jr., M.D.
J. David Nagel, M.D.

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Treasurer

Mr. President and Members of the House of Delegates:

The financial books and records of Med Chi for the year ending December 31, 1992, have been audited by the firm of Naden/Lean, Certified Public Accountants. The financial statements reflecting the financial position of Med Chi at year end 1991 and 1992 and the related statements of income, expenditures, transfers, and changes in fund balances for the year then ended are published in this *Maryland Medical Journal.* The auditors submitted an unqualified opinion that the financial statements are accurate and conform to generally accepted accounting principles.

The 1993 budget was referred to the Executive Committee in November 1992 and approved by the committee in January 1993. It is also presented in this *Maryland Medical Journal* for informational purposes.

Treasurer Albert L. Blumberg, M.D.

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Jose Yosuico, M.D., accepts the past president's plaque from George Malouf, Sr., M.D.

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To volunteer or for more details, call Med Chi's Public Relations Department at 410-539-0872 1-800-492-1056.

Doctor/Lawyer/Teacher Partnership Against Drugs

THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND

Financial Statements

December 31, 1992, and 1991

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Naden/Lean CERTIFIED PUBLIC ACCOUNTANTS AND BUSINESS CONSULTANTS

INDEPENDENT AUDITORS' REPORT

The Medical and Chirurgical Faculty
of Maryland
Baltimore, Maryland

We have audited the accompanying balance sheets of the Medical and Chirurgical Faculty of Maryland (the "Faculty") as of December 31, 1992 and 1991, and the related statements of revenue and expenses, changes in fund balances, and cash flows for the years then ended. These financial statements are the responsibility of the Faculty's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Medical and Chirurgical Faculty of Maryland at December 31, 1992 and 1991, and the results of its operations, changes in fund balances, and cash flows for the years then ended, in conformity with generally accepted accounting principles.

Our audits were conducted for the purpose of expressing an opinion on the basic financial statements taken as a whole. The supplementary information is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has been subjected to the procedures applied in the audits of the basic financial statements and, in our opinion, is fairly stated in relation to the basic financial statement taken as a whole.

Information for the year ended December 31, 1991 is presented for comparative purposes only and was extracted from the financial statements presented by Fund for that year, on which an unqualified opinion dated May 13, 1992, was expressed.

Naden/Lean

June 11, 1993
Lutherville, Maryland

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Balance Sheet

December 31, 1992 (with comparative totals for 1991)

	General Funds	Med Chi Insurance Fund	Plant Fund	Restricted funds: Endowment and Special Funds	Restricted funds: Other Restricted Funds	Total All Funds: 1992	Total All Funds: 1991
ASSETS							
Current							
Cash	$3,399,087	$3,191,838	$ -	$221,276	$635,969	$7,448,170	$7,778,125
Accounts Receivable							
Membership dues, journal & advertising	55,288	-	-	-	-	55,288	110,382
Other funds	324,090	-	-	858,775	-	1,182,865	702,077
Other	15,649	10,620	-	16,763	3,972	47,004	75,283
The Med Chi Agency, Inc.	71,131	-	-	-	-	71,131	15,901
Prepaid pension cost	226,424	-	-	-	-	226,424	170,475
Prepaid expenses	17,906	-	-	-	-	17,906	22,333
TOTAL CURRENT ASSETS	4,109,575	3,202,458	-	1,096,814	639,941	9,048,788	8,874,576
Marketable securities	758,811	-	-	2,467,568	-	3,226,379	2,568,235
Investment-The Med Chi Agency, Inc.	220,192	-	-	-	-	220,192	113,493
Investment--Management Services Corp. of Med Chi, Inc.	12,772	-	-	-	-	12,772	12,772
Loans receivable	28,414	-	-	-	-	28,414	-
Fixed assets--Net	-	-	2,835,335	-	53,014	2,888,349	2,903,796
TOTAL ASSETS	$5,129,764	$3,202,458	$2,835,335	$3,564,382	$692,955	$15,424,894	$14,472,872
LIABILITIES AND FUND BALANCES							
Current							
Accounts Payable							
Trade	$106,946	$2,385,342	$ -	$ -	$ -	$2,492,288	$2,735,950
Other funds	858,775	56,178	-	-	267,912	1,182,865	702,077
The Med Chi Agency, Inc.	-	231,686	-	-	-	231,686	96,898
Component societies	827,529	-	-	-	-	827,529	793,633
Payroll taxes	33,287	-	-	-	-	33,287	10,000
Other	15,853	-	-	-	-	15,853	-
Accrued expenses	115,755	-	-	-	-	115,755	89,883
Deferred income	833,885	-	-	-	-	833,885	878,687
Deferred compensation	56,194	-	-	116,701	-	172,895	220,942
TOTAL CURRENT LIABILITIES	2,848,224	2,673,206	-	116,701	267,912	5,906,043	5,528,070
Fund Balances							
Investment in fixed assets	-	-	2,835,335	-	-	2,835,335	2,830,819
Designated funds							
Legal fund	87,425	-	-	-	-	87,425	87,425
Educational purpose	81,455	-	-	-	-	81,455	86,063
Continuing medical education	22,120	-	-	-	-	22,120	19,970
Building fund	82,216	-	-	-	-	82,216	81,271
Coggins building fund	7,779	-	-	-	-	7,779	17,425
Membership services reserve	200,242	-	-	-	-	200,242	196,417
Other	18,116	-	-	-	-	18,116	18,116
Restricted funds	-	-	-	3,447,681	425,043	3,872,724	3,290,911
Unrestricted	1,782,187	529,252	-	-	-	2,311,439	2,316,385
TOTAL FUND BALANCES	2,281,540	529,252	2,835,335	3,447,681	425,043	9,518,851	8,944,802
TOTAL LIABILITIES AND FUND BALANCES	$5,129,764	$3,202,458	$2,835,335	$3,564,382	$692,955	$15,424,894	$14,472,872

See independent auditors' report and accompanying notes.

Statement of Revenue and Expenses

For the Year Ended December 31, 1992 (with comparative totals for 1991)

	General Funds		Med Chi Insurance	Plant	Restricted Funds			Total All Funds	
	Designated	Undesignated	Fund	Fund	Endowment and Special Funds	Physician's Rehab. Fund	Other Funds	1992	1991
REVENUE									
Dues	$6,805	$1,196,624	$ -	$ -	$ -	$ -	$ -	$1,203,429	$1,266,524
Licensure assessments	-	-	-	-	-	687,500	-	687,500	314,250
Rents and services	-	480,247	-	-	-	-	-	480,247	312,693
Journal advertising and subscriptions	-	143,935	-	-	-	-	-	143,935	175,435
Meetings	-	71,747	-	-	-	-	-	71,747	91,656
Administrative fees	-	-	66,716	-	-	-	-	66,716	50,823
Interest	-	117,137	162,290	-	-	-	-	279,427	447,696
Investments	-	-	-	-	138,842	13,982	-	152,824	181,610
Miscellaneous	20,457	180,392	-	-	-	15,325	-	216,174	196,304
Equity interest in The Med Chi Agency, Inc.	-	406,699	-	-	-	-	-	406,699	320,189
Equity in Management Services Corporation of Med Chi, Inc.	-	-	-	-	-	-	-	-	(40)
Other income and contributions received	-	-	-	-	2,000	-	-	2,000	15,100
TOTAL REVENUE	27,262	2,596,781	229,006	-	140,842	716,807	-	3,710,698	3,372,240
GRANTS	-	-	-	-	-	-	228,445	228,445	118,384
TOTAL REVENUE AND GRANTS	27,262	2,596,781	229,006	-	140,842	716,807	228,445	3,939,143	3,490,624
OPERATING EXPENSES	34,596	2,593,600	79,132	151,674	132,329	618,603	230,050	3,839,984	3,573,303
(DEFICIENCY) EXCESS OF REVENUE AND GRANTS OVER EXPENSES BEFORE GAIN ON SALE OF SECURITIES AND WRITE-DOWN OF LOANS RECEIVABLE	(7,334)	3,181	149,874	(151,674)	8,513	98,204	(1,605)	99,159	(82,679)
GAIN ON SALE OF SECURITIES	-	-	-	-	474,890	-	-	474,890	42,072
WRITE-DOWN OF LOANS RECEIVABLE	-	-	-	-	-	-	-	-	(226,039)
(DEFICIENCY) EXCESS OF REVENUE AND GRANTS OVER EXPENSES, GAIN ON SALE OF SECURITIES, AND WRITE-DOWN OF LOANS RECEIVABLE	$(7,334)	$3,181	$149,874	$(151,674)	$483,403	$98,204	$(1,605)	$574,049	$(266,646)

See independent auditors' report and accompanying notes.

Statement of Changes in Fund Balances

For the Year Ended December 31, 1992 (with comparative totals for 1991)

	General Funds		Med Chi Insurance Fund	Plant Fund	Restricted Funds			Total All Funds
	Designated	Undesignated			Endowment and Special Funds	Physician's Rehab. Fund	Other Funds	
Fund Balances, December 31, 1990	$467,070	$1,902,959	$549,167	$2,930,782	$2,857,776	$503,694	$ -	$9,211,448
(DEFICIENCY) EXCESS OF REVENUE AND GRANTS OVER EXPENSES, GAIN ON SALE OF SECURITIES, AND WRITE-DOWN OF LOANS RECEIVABLE	39,617	(378,389)	259,211	(114,074)	106,502	(177,061)	(2,452)	(266,646)
Fund Transfers:								
Med Chi insurance to general fund	-	285,000	(285,000)	-	-	-	-	-
General to restricted fund	-	(2,452)	-	-	-	-	2,452	-
General to plant fund	-	(14,111)	-	14,111	-	-	-	-
Total transfers—net	-	268,437	(285,000)	14,111	-	-	2,452	-
Fund Balances, December 31, 1991	506,687	1,793,007	523,378	2,830,819	2,964,278	326,633	-	8,944,802
(DEFICIENCY) EXCESS OF REVENUE AND GRANTS OVER EXPENSES, GAIN ON SALE OF SECURITIES, AND WRITE-DOWN OF LOANS RECEIVABLE	(7,334)	3,181	149,874	(151,674)	483,403	98,204	(1,605)	574,049
Fund Transfers:								
Med Chi insurance to general fund	-	144,000	(144,000)	-	-	-	-	-
General to restricted fund	-	(1,811)	-	-	-	-	1,811	-
General to plant fund	-	(156,190)	-	156,190	-	-	-	-
Total transfers—net	-	(14,001)	(144,000)	156,190	-	-	1,811	-
FUND BALANCES, DECEMBER 31, 1992	$499,353	$1,782,187	$529,252	$2,835,335	$3,447,681	$424,837	$206	$9,518,851

See independent auditors' report and accompanying notes.

Statements of Cash Flows
Total All Funds

For the Years Ended December 31, 1992, and 1991

	1992	1991
CASH FLOWS FROM OPERATING ACTIVITIES:		
(Deficiency) excess of revenue and grants over expenses, gain on sale of securities, and write-down of loans receivable	$574,049	$(266,646)
Adjustments to reconcile (deficiency) excess of revenue and grants over expenses, gain on sale of securities, and write-down of loans receivable to net cash provided by operating activities:		
Depreciation	171,637	137,062
Equity in earnings of subsidiaries	(106,699)	(21,332)
Gain on sale of securities	(474,890)	-
Changes in certain assets and liabilities:		
Accounts receivable—membership dues, journal, and advertising	55,094	(13,352)
Accounts receivable—other funds	(480,788)	(40,622)
Accounts receivable—other	28,279	95,235
Accounts receivable—The Med Chi Agency, Inc.	(55,230)	209,401
Loans receivable	(28,414)	81,875
Prepaid pension cost	(55,949)	(73,418)
Prepaid expenses	4,427	(3,117)
Accounts payable—trade	(243,662)	140,497
Accounts payable—other funds	480,788	40,622
Accounts payable—The Med Chi Agency, Inc.	134,788	22,030
Accounts payable—component societies	33,896	82,008
Accounts payable—payroll taxes	23,287	420
Accounts payable—other	15,853	-
Accrued expenses	25,872	9,687
Deferred income	(44,802)	80,732
Deferred compensation	(48,047)	(38,120)
Net cash provided by operating activities	9,489	442,962
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of marketable securities	(5,054,698)	(112,515)
Proceeds from sale of securities	4,871,444	42,072
Purchases of fixed assets	(156,190)	(56,722)
Net cash used in investing activities	(339,444)	(127,165)
NET INCREASE (DECREASE) IN CASH	(329,955)	315,797
CASH AT BEGINNING OF YEAR	7,778,125	7,462,328
CASH AT END OF YEAR	$7,448,170	$7,778,125

See independent auditors' report and accompanying notes.

Notes to Financial Statements

December 31, 1992

Note 1—SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Entity

The Medical and Chirurgical Faculty of Maryland (the "Faculty") is a nonprofit organization, tax exempt under Section 501(c)(6) of the Internal Revenue Code. The Faculty is not classified as a private foundation.

Fund Accounting

The accounts of the Faculty are maintained in accordance with the principles of fund accounting whereby resources are classified for accounting and reporting purposes into funds established according to their nature and purpose. Separate accounts are maintained for each fund; accordingly, the assets, liabilities, and fund balances are recorded in self-balancing funds as follows:

- *General Funds*—used to account for revenues and expenses related to the operation and management of the Faculty's general operations. Certain board designated amounts are also reflected in this fund.
- *Endowment and Special Funds*—used to account for resources which are available for use, but expendible only for the purposes specifically designated by the donor.
- *Plant Fund*—used to account for the Faculty's investment in fixed assets.
- *Med Chi Insurance Fund*—used to record billing and disbursement transactions related to the administration of insurance activities.
- *Restricted Funds*—used to account for revenues and expenses related to the Physician's Rehabilitation, Baltimore Substance Abuse, March of Dimes, AMA—Health Access America, and Maryland Diabetes Control programs.

Description of Major Programs Supported Through Restricted Funds

Physician's Rehabilitation Program. The goal of this program is to identify physicians unable to practice medicine with reasonable skill and safety due to physical or mental illness, including alcoholism or drug dependence, and to provide assistance to the physician in obtaining rehabilitation, either through private or public sources.

The Physician's Rehabilitation Program is available to all physicians in the State of Maryland, their family members, and medical students.

Funds from this program are also used to perform peer reviews of physicians who are referred to the Faculty by the Board of Physician Quality Assurance.

Baltimore Substance Abuse Program. This program was established to develop a curriculum for primary care physicians on how to screen, counsel, and refer their substance-abusing patients. This curriculum will be presented to local hospitals, community health centers, and the like. The goal of this program is to provide this information to all primary care physicians in Baltimore City.

March of Dimes Program. The purpose of this program is to conduct a continuing medical education program for practicing physicians that will enable them to help their pregnant patients stop smoking. Presentations were held at area hospitals.

AMA—Health Access America Program. This program supports Med Chi's outreach program to inform Maryland physicians of a proposal developed by the American Medical Association (AMA) to improve access to affordable, quality health care in the United States. This proposal is designed to control health care cost increases, reform Medicare and Medicaid, and insure that all Americans have access to health care.

Maryland Diabetes Control Program Demonstration Project. This project involves designing, implementing, and evaluating a demonstration project that shows the effectiveness of a physician's office-based and patient-initiated system to remind practitioners to provide certain clinical services during a diabetes-related physician visit.

Cash and Cash Equivalents

Cash consists of cash and cash equivalents such as overnight investments, money market accounts, and certificates of deposits with a maturity of less than one year. Some of these deposits with financial institutions exceed federally insured limits.

Fixed Assets

Fixed assets are stated at cost or, if donated, at the approximate fair value at the date of donation. Depreciation is computed for fixed assets acquired prior to 1981 using the straight line method over the estimated useful lives of related assets. For assets acquired subsequent to 1980, depreciation is computed using the accelerated cost recovery or modified accelerated cost recovery systems based on the estimated useful lives of the related assets.

Depreciation expense for the years ended December 31, 1992, and 1991 was $171,637 and $137,062, respectively.

Marketable Securities

Marketable securities are carried at lower of cost or market. Market values at December 31, 1992, and 1991 were $3,422,256 and $3,256,595, respectively.

Investment in Subsidiaries

The Faculty carries its investment in its 100% owned subsidiary, Med Chi Agency, Inc. (the "Agency"), at equity. The net assets of the Agency as of December 31, 1992, and 1991 were as follows:

	1992	1991
Current assets	$299,902	$158,836
Fixed assets—net	29,036	22,130
	328,938	180,966
Current liabilities	108,746	67,473
	$220,192	$113,493

The Agency generated net income for the years ended December 31, 1992, and 1991 of $400,561 and $326,327, respectively.

The Faculty carries its investment in the 100% owned Management Services Corporation of Med Chi, Inc. (the "Corporation"), at equity. The net assets of the Corporation as of December 31, 1992, and 1991 were $12,772.

Allocation of Expenses

Expenses are charged to each program based on direct expenditures incurred. Indirect expenses are allocated to the various programs based on management's estimate of employee time allocations and in accordance with the various grant agreements.

Deferred Income

Deferred income reflects dues and fees collected as of the Balance Sheet date, related to the subsequent year.

Financial Statement Presentation

Certain amounts in 1991 have been reclassified to conform with the 1992 presentation.

NOTE 2—FIXED ASSETS

Fixed assets at December 31, 1992, and 1991 are summarized as follows:

	1992	1991	Life in Years
PLANT FUND:			
Land, buildings, and improvements			
1209-1215 Cathedral Street			
Land and building	$110,636	$110,636	40
Improvements	543,035	543,035	40
1205-1207 Cathedral Street and			
1204 Maryland Avenue			
Land and buildings	2,138,624	2,138,624	40
Improvements	188,296	188,296	40
224 Main Street, Annapolis			
Land and buildings	545,856	545,856	40
Improvements	15,013	-	40
Total cost	3,541,460	3,526,447	31.5–40
Less—accumulated depreciation	(833,503)	(748,063)	
	2,707,957	2,778,384	
Other			
Library books and journals	231,370	231,370	10
Office and library fixtures, antiques, and museum pieces	87,570	87,570	10
Portraits	65,000	65,000	10
Office furniture and equipment	433,857	364,861	5–7
Automobiles	23,208	15,700	3
Total cost	841,005	764,501	
Less—accumulated depreciation	(713,627)	(712,066)	
	127,378	52,435	
Total plant fund—net	2,835,335	2,830,819	
RESTRICTED FUNDS:			
Office renovations	22,995	22,995	31.5
Less—accumulated depreciation	(1,369)	(639)	
	21,626	22,356	
Office equipment and furniture	84,674	84,674	5–7
Less—accumulated depreciation	(53,286)	(34,053)	
	31,388	50,621	
Total restricted funds—net	53,014	72,977	
TOTAL FIXED ASSETS—NET	$2,888,349	$2,903,796	

NOTE 3—WRITE-DOWN OF LOANS RECEIVABLE

At 12/31/91, the Faculty wrote-off $172,835 of loans receivable from Healthcare Credentials Verification, Inc. The receivables were considered uncollectible since they were unsecured and due to the cessation of Healthcare Credentials Verification, Inc.'s operations. Additionally, the Faculty wrote-off $53,204 of loans receivable from Maryland Foundation for Health Care which were not considered collectible due to financial difficulties experienced by the company.

NOTE 4—PENSION PLAN

The Faculty sponsors a noncontributory defined benefit pension plan (the "Plan") that covers substantially all employees of the Faculty and its subsidiaries who have attained the age of 21 and completed one year of service. The Plan calls for benefits to be paid to eligible employees at retirement based on the average compensation for the five highest consecutive years of credited service.

The Faculty's funding policy is to fund pension costs accrued. Actuarially determined pension costs are funded on an annual basis by the Frozen Initial Liability Method with initial accrued liabilities compensated under the Entry Age Normal Tax Method.

Plan assets consist primarily of common and preferred stocks, corporate bonds, mutual funds, and short-term investments.

The following table sets forth the plan's funded status and amounts recognized in the Faculty's balance sheets at December 31:

	1992	1991
ACTUARIAL PRESENT VALUE OF BENEFIT OBLIGATIONS:		
Accumulated benefit obligation		
Vested	$582,418	$477,504
Non-vested	55,855	64,035
	638,273	541,539
Effect of anticipated future compensation levels and other events	233,721	257,571
Projected benefit obligation for service rendered to date	871,994	799,110
Plan assets at fair value	1,379,684	1,307,304
Plan assets in excess of projected benefit obligation	507,690	508,194
Unrecognized net (gain) loss	14,103	(30,054)
Unrecognized net transition asset (from adoption of FASB Statement No. 87)	(295,369)	(307,665)
Prepaid pension cost recognized on balance sheet	$226,424	$170,475

Actuarial pension expense for 1992 and 1991 includes the following components:

	1992	1991
Service cost of the current period	$96,347	$71,035
Interest cost on the projected benefit obligation	61,128	59,476
Estimated return on assets held in the plan	(72,393)	(220,470)
Net amortization and deferral	(57,560)	114,713
Net periodic pension expenses	$27,522	$24,754

Actuarial assumptions used in determining the actuarial present value of the projected benefit obligation were as follows:

	1992	1991
Weighted-average discount rate	8%	8%
Rate of increase in future compensation	4	4
Expected long-term rate of return on assets	9	9

NOTE 5—RELATED PARTIES

The Medical and Chirurgical Faculty of Maryland owns the stock of The Med Chi Agency, Inc. The Faculty leases office space to the Agency under a month-to-month lease. Lease payments from the Agency were $30,000 and $18,336 for 1992 and 1991, respectively. Additionally, the Faculty performed certain management and accounting services for the Agency. Income for these services amounted to $144,500 and $121,000 in 1992 and 1991, respectively.

The Medical and Chirurgical Faculty of Maryland owns the stock of Management Services Corporation of Med Chi, Inc. There were no charges to the corporation in 1992 and 1991 for management and accounting services performed by the Faculty for the corporation.

NOTE 6—COMMITMENTS

The Faculty entered into an agreement with Dr. Jane Eliot Sewell to have Dr. Sewell write a book dealing with the history of medicine in Maryland. The contractual cost for the writing of this publication is $76,500. It is the intention of management for the Ruhrah Fund, in the endowment and special funds, to incur the costs of this publication. Anticipated future payments to be made, based on agreed upon completed chapters of the book, are as follows:

Year Ended December 31	Amount
1993	$13,517
1994	17,000
1995	17,000
1996	17,000
1997	7,083

SCHEDULES OF OPERATING EXPENSES

For the Year Ended December 31, 1992 (with comparative totals for 1991)

	General Funds		Med Chi Insurance	Plant	Restricted Funds			Total All Funds	
	Designated	Undesignated	Fund	Fund	Endowment and Special Funds	Physician's Rehab. Fund	Other Funds	1992	1991
Administrative services	$ -	$ -	$49,029	$ -	$ -	$ -	$ -	$49,029	$46,909
AMA delegation	-	63,375	-	-	-	-	-	63,375	53,650
Annual and semiannual mtgs	-	90,411	-	-	-	-	-	90,411	108,446
Auditing fees	-	11,000	1,000	-	-	-	-	12,000	13,000
Auxiliary	-	1,000	-	-	-	-	-	1,000	1,000
Bad debts	-	7,684	-	-	-	-	-	7,684	-
Benefits	-	105,021	-	-	-	78,531	35,917	219,469	218,747
Charitable and Education Fund, Inc.	-	-	-	-	26,895	-	-	26,895	-
Collection fees	-	-	-	-	-	78,608	-	78,608	-
Conferences	-	4,153	-	-	-	3,267	-	7,420	12,388
Contract services	7,800	31,598	-	-	-	-	4,589	43,987	14,116
Contributions	-	-	-	-	-	-	-	-	3,500
Data processing	-	12,913	-	-	-	-	-	12,913	9,605
Depreciation	-	-	-	151,674	-	19,963	-	171,637	137,062
Document fees	-	-	-	-	-	-	-	-	10,456
Equipment	-	3,159	-	-	-	-	7,837	10,996	4,050
Equipment maintenance	-	29,420	-	-	-	28	-	29,448	9,746
Evaluations and screenings	-	-	-	-	-	22,862	-	22,862	15,602
Gifts and memorials	-	2,263	-	-	-	-	-	2,263	3,460
Government relations	-	324,623	-	-	-	-	-	324,623	347,703
Honorarium	-	-	-	-	-	-	-	-	200
Insurance	-	20,051	-	-	-	-	-	20,051	28,386
Interest	-	4,181	-	-	-	-	-	4,181	-
Investment fees	-	-	21,529	-	19,309	-	-	40,838	24,609
Janitorial supplies	-	7,654	-	-	-	-	-	7,654	8,313
Lewis Henry Steiner Income Fund expenses	-	-	-	-	12,224	-	-	12,224	32,390
Library and lectureship	-	9,276	-	-	73,901	-	-	83,177	65,198
Marketing	-	325	-	-	-	2,294	1,800	4,419	19,148
Maintenance of property	9,529	15,898	-	-	-	-	-	25,427	31,150
Meetings	-	25,652	-	-	-	980	221	26,853	25,980
Membership and certification	-	3,336	-	-	-	700	-	4,036	1,610
Miscellaneous	11,291	13,988	6,139	-	-	531	-	31,949	52,816
Office supplies	-	36,784	-	-	-	-	-	36,784	33,006
Payroll taxes	-	132,187	-	-	-	-	-	132,187	120,368
Photocopying	-	361	-	-	-	1,551	650	2,562	25,526
Postage and shipping	-	92,849	4	-	-	16,186	623	109,662	89,864
President's honorarium	-	30,000	-	-	-	-	-	30,000	30,000
Printing and publishing	-	204,020	-	-	-	12,934	-	216,954	190,395
Publications	-	8,277	-	-	-	1,936	330	10,543	1,731
Rent	-	-	-	-	-	27,000	4,200	31,200	30,120
Research	-	-	1,181	-	-	-	-	1,181	2,279
Salaries	-	1,193,580	-	-	-	340,516	162,120	1,696,216	1,588,443
Supplies	-	-	-	-	-	4,858	2,763	7,621	10,239
Telephone and fax	-	36,456	250	-	-	4,140	1,920	42,766	50,423
Travel	-	13,387	-	-	-	1,718	410	15,515	26,560
Utilities	5,976	58,718	-	-	-	-	6,670	71,364	75,109
	$34,596	$2,593,600	$79,132	$151,674	$132,329	$618,603	$230,050	$3,839,984	$3,573,303

SUPPLEMENTARY INFORMATION

Schedule of Income and Expenditures
Endowment Fund—Consolidated Fund—Income Accounts

For the Years Ended December 31, 1992, and 1991

	1992	1991
Income		
Distributive share of investment income	$82,452	$76,979
Direct share of investment income	-	2,376
	82,452	79,355
Expenditures		
Library and lectureship	71,328	62,996
Investment expenses	12,353	2,252
	83, 681	65, 248
Excess (defiency) of income over expenditures	$(1,229)	$14, 107

Schedule of Receipts, Expenses, and Fund Balances
Endowment Fund—Consolidated Fund—Income Accounts

For the Year Ended December 31, 1992

Fund	Distributive Share (%)	Fund Balance 1/1/92	Investment Income Distributive Share—Net	Expenses Library and Lectureship	Transfers In	Fund Balance 12/31/92
Baker	0.61	$ 64	$ 490	$ 430	$ -	$ 124
Barker, Lewellyn F.	0.37	44	297	238	-	103
Beck, Harvey	0.23	611	212	28	-	795
Bowen, Joseph S.	8.68	32,476	6,978	1,123	-	38,331
Bressler, Frank C.	1.70	6,355	1,366	219	-	7,502
Cordell, Eugene Fauntleroy	7.59	57,231	6,915	979	-	63,167
Cowles, Nellie N.	0.72	119	579	543	-	155
Finney, John M.T.	7.95	18,955	6,392	7,564	-	17,783
Frick, William F.	14.21	53,082	11,424	34,230	-	30,276
Friedenwald, Dr. Julius F.	0.72	2,660	579	89	-	3,150
Funded reserve	0.98	51,638	2,004	(377)	-	54,019
Harlan, Herbert	0.72	518	579	679	-	418
McCleary, Standish	0.71	1,444	571	1,390	-	625
Osler endowment	1.32	582	1,061	1,259	-	384
Osler testimonial	7.33	12,342	5,893	7,503	-	10,732
Ruhrah, John	38.61	44,497	31,042	25,805	-	49,734
Stokes, William Royal	2.92	8,514	2,347	579	-	10,282
Trimble, John Ridgeway	2.50	7,647	2,010	1,123	-	8,534
Woods, Hiram	2.13	7,980	1,713	277	-	9,416
	100.00	$306,759	$82,452	$83,681	$ -	$305,530

SUPPLEMENTARY INFORMATION

Schedule of Fund Balances
Endowment Fund—Consolidated Fund—Principal Accounts

For the Year Ended December 31, 1992

	Purpose	Fund Balance 1/1/92	Gain or (Loss) on Sale of Securities	Transfers in	Fund Balance 12/31/92
Baker	Book of material medicine	$8,347	$1,890	$ -	$10,237
Barker, Lewellyn E.	Library	4,998	1,146	-	6,144
Beck, Harvey	Lectureship	3,067	712	-	3,779
Bowen, Joseph S.	General	117,960	26,888	-	144,848
Bressler, Frank C.	General	23,124	5,267	-	28,391
Cordell, Eugene Fauntleroy	Relief of widows and orphans	103,118	23,512	-	126,630
Cowles, Nellie N.	Books of neurology	9,656	2,231	-	11,887
Finney, John M.T.	Books, journals, and lectureships on surgery	108,034	24,626	-	132,660
Frick, William F.	Maintenance of Frick Library and purchase of books and journals	193,159	44,018	-	237,177
Friedenwald, Dr. Julius F.	Maintenance of Friedenwald Room	9,656	2,230	-	11,886
Funded reserve	Contingency fund	13,364	3,036	-	16,400
Harlan, Herbert	Books on ophthalmology	9,787	2,230	-	12,017
McCleary, Standish	Lectureship and books on pathology	9,656	2,199	-	11,855
Osler endowment	Permanent endowment for library by request of Dr. Osler	17,993	4,089	-	22,082
Osler testimonial	Medical books and maintenance of Osler Hall	99,635	22,707	-	122,342
Ruhrah, John	Library, books, journals, etc.	524,653	119,603	-	644,256
Stokes, William Royal	Lectureship and books on bacteriology or pathology	39,744	9,046	-	48,790
Trimble, John Ridgeway	Lectureship only	33,959	7,744	-	41,703
Woods, Hiram	General	28,970	6,598	-	35,568
		$1,358,880	$309,772	$ -	$1,668,652

SCHEDULE OF FUND BALANCES
ENDOWMENT AND SPECIAL FUNDS

For the Year Ended December 31, 1992

	Balance 1/1/92	Investment Income	Contributions	Gain (Loss) on Sale of Securities	Expenditures	Transfers In (Out)	Balance 12/31/92
Consolidated Fund							
Income	$306,759	$82,452	$ -	$ -	$83,681	$ -	$305,530
Principal	1,358,880	-	-	309,772	-	-	1,668,652
Boyer auxiliary income fund	1,401	49	-	-	4	-	1,446
George M. Boyer lectureship fund	22,724	988	-	-	500	-	23,212
Jesse C. Coggins Fund--lectureship	12,022	559	-	-	4	-	12,577
Community Health Project	6,503	290	-	-	4	-	6,789
J. Sheldon Eastland lectureship fund	6,201	224	-	-	-	-	6,425
J. Mason Hundley memorial fund	21,810	1,019	-	-	4	-	22,825
Henry P. Laughlin special award fund	31,472	1,643	1,800	-	26,895	-	8,020
Robinson Fund	6,717	293	200	-	554	-	6,656
Charles H. Ellis—general	253,840	9,566	-	-	-	-	263,406
Louis J. Kolodner lectureship fund	12,448	693	-	-	680	-	12,461
Amos Koontz memorial fund	4,329	152	-	-	19	-	4,462
Louis Krause memorial fund	2,380	122	-	-	-	-	2,502
E. Schimunek	6,158	274	-	-	500	-	5,932
Lewis Henry Steiner Fund							
Income	65,371	40,108	-	-	19,180	-	86,299
Principal	836,187	-	-	165,118	-	-	1,001,305
Grant E. Ward lectureship fund	9,076	410	-	-	304	-	9,182
	$2,964,278	$138,842	$2,000	$474,890	$132,329	$ -	$3,447,681

Call for Papers

1994 International Conference on Physician Health
September 16-20, 1994. Ottawa, Ontario, Canada

"Stress: The Profession, the Family and You"

The 1994 International Conference on Physician Health, co-sponsored by the American Medical Association, the Federation of State Medical Boards, the Canadian Medical Association, and the Federation of Medical Licensing Authorities of Canada is scheduled for September 16-20, 1994, at the Ottawa Westin Hotel.

Ottawa is Canada's capital and offers many national museums, over 60 miles of bicycle paths, hiking in Gateneau park, squash courts and swimming at the hotel and golf nearby.

The conference will provide a forum for practitioners and researchers to present recent findings and innovative treatment and education programs in physician health. This conference will address a range of issues, such as AIDS, HIV, problems related to aging, mental illness, substance abuse and physical disabilities and limitations, including those caused by general medical conditions. Possible topics for presentation include: presentation and treatment of health problems among physicians, the impact of disorders on physicians' families and practices, medical-legal issues facing hospital administrations and licensing boards, and material on health promotion and disease prevention. *Abstracts which address issues related to these topics (i.e., prevention, diagnosis, treatment, rehabilitation), but not dealing specifically with physicians are also welcome.*

Three types of presentations regarding these physician health issues are invited:

- **Poster Presentations**
  Written presentations of data-based research, epidemiological research, or program descriptions.

- **Paper Sessions**
  Oral presentation of scientific, data-based findings relative to the topic of physician health.

  Abstracts for poster presentations and paper sessions should contain an introductory statement on the significance of subject matter. Description of methods, results, and conclusions should follow the introductory statement.

- **Workshops**
  Training or instructional presentations, designed to improve specific skills of persons who work in the area of physician health.

  Abstracts for workshops should contain information on the program's intended audience, goals, teaching strategies, and materials. Evaluation data should be summarized

Abstracts may not exceed 200 words. Any abstracts exceeding that length will be rejected. Abstracts should be typed, double spaced, and mailed (not faxed). Four copies of the abstract should be sent, along with one self-addressed, stamped envelope. All submissions must list the primary and secondary authors and their professional affiliations. Telephone number and address of primary author must also be included.

Submissions *must* be received by February 1, 1994.

Abstracts will be submitted for blind review. Abstracts will be judged on their applicability to the conference topic area and their scientific merit. The decisions of the blind reviewers will be communicated to the abstract's primary author by April 1, 1994.

All presenters are expected to register for the conference at the AMA member rate. We are unable to provide any financial support for presenters. Presenters will also be responsible for their own transportation and hotel expenses, as well as making all reservations for same.

Send all materials to:
Elaine M. Tejcek, Physicians Health Foundation, American Medical Association, 515 N. State Street, Chicago, IL 60610.

American Medical Association
Physicians dedicated to the health of America

1993 Budget

Department expenses

	Administration	Finance & membership	Maintenance & janitorial	*MMJ*	Public relations & conventions	Graphics
Salary	$266,934	$144,868	$78,534	$39,012	$91,073	$41,735
Salary incentive						
Benefits	61,395	45,287	19,213	8,973	17,898	10,484
Supplies	5,300	6,000	10,000	200	3,000	2,000
Equipment						
Equipment maintenance						
Software						
Travel	10,000	1,000	800	150	1,200	300
Education courses	1,000	500		700	650	300
Membership & certification	1,000	500		100	300	
Publications	1,000	100		100	450	580
Postage and shipping	20,000	9,000		25,500	9,000	50
Printing and publishing	100	1,500		169,500	11,000	4,000
Photocopying						
Contract services			27,000	9,150	1,800	
Meetings	23,000					
AMA delegation travel	52,000					
AMA OSMAP	300					
AMA candidate support	25,000					
AMA S.E. delegation	3,500					
AMA delegation, misc.	1,500					
Leadership conference	5,500					
President's honorarium	30,000					
President's expense account	4,000					
Data processing		2,983				
Auditing		10,500				
Awards				200	4,000	
Photo supplies						2,000
Gifts and memorials					850	
Interlibrary loans						
Medlars						
Music in medicine						
Mobile telephone	3,600					
Auxiliary						
Marketing					4,000	
Annual meeting					75,000	
Semiannual meeting					12,000	
Utilities						
Telephone						
Telephone/fax						
Insurance						
Parking						
Handbook						3,500
Bylaws						3,000
Directory						20,000
Lobbyists						
Lobbyists' expense account						
First aid supply room R.N.						
Annapolis office						
Miscellaneous		1,500				
TOTAL	$515,129	$223,738	$135,547	$253,585	$232,221	$87,949

1993 Budget

Department expenses

Human resources	Legal & govt. relations	Computer services	Library	Education	Association services	Corporate	TOTAL
$34,916	$190,172	$52,155	$129,783	$219,061	$49,920	$49,378	$1,387,541
						20,000	20,000
5,827	33,602	16,048	29,632	50,384		11,357	310,100
300	3,000	4,000	4,000	5,000		10,000	52,800
		30,000					30,000
		15,000					15,000
		500					500
100	4,000		3,000	5,500			26,050
500	500	1,500	1,000				6,650
300	2,000	200	800				5,200
1,500	2,000	750	200				6,680
500	2,000	1,000	3,800	2,000		20,000	92,850
			1,500				187,600
			500			30,000	30,500
3,000		5,500	3,000	8,000			57,450
	13,000						36,000
							52,000
							300
							25,000
							3,500
							1,500
							5,500
							30,000
							4,000
							2,983
							10,500
							4,200
							2,000
2,500							3,350
			8,000				8,000
			3,000				3,000
			1,000				1,000
							3,600
						1,000	1,000
							4,000
							75,000
							12,000
						75,000	75,000
						45,000	45,000
						3,000	3,000
						30,000	30,000
						12,000	12,000
							3,500
							3,000
							20,000
	70,000						70,000
	6,000						6,000
	12,000						12,000
	18,000					7,000	25,000
							1,500
$49,443	$356,274	$126,653	$189,215	$289,945	$49,920	$313,735	$2,823,354

1993 Budget

Department revenues

Finance and membership	
Membership dues	$1,175,000
Short-term investments	320,000
Interest income	100,000
Investments--other funds	212,000
Insurance activities	127,000
Rental income	64,200
Collection service	38,000
Credit cards	3,000
Parking	800
Lists and labels	10,000
Subscription services	200
Dues collection fees	20,000
Specialist identification	1,000
TOTAL	$2,071,200
Maryland Medical Journal	
Local advertising	$139,680
National advertising	19,200
Classified advertising	9,300
Reprints	5,000
Subscriptions	7,000
Non-subscription sales	1,200
Miscellaneous	100
TOTAL	$181,480
Graphics	
Directory sales	9,000
Directory advertising	25,000
Eye physicians newsletter	350
The Maryland Psychiatrist	600
Physician's Practice Digest	8,000
Design services	500
Compendium	600
Model Hospital Medical Staff Bylaws	300
TOTAL	$44,350
Public relations and conventions	
Annual meeting exhibits	$65,000
Semiannual meeting exhibits	12,000
TOTAL	$77,000
Computer services	
AMA profile	5,000
Malpractice cases	1,000
HCAO--copying	2,500
BPQA--contracts	50,000
TOTAL	$58,500
Library	
ICD9 code books	600
Hospital library cataloging	750
Hospital library periodicals	350
Interlibrary loans	10,500
Literature searches	10,000
Music in medicine	200
Nonaffliated user registration	7,000
Photocopying	5,000
Physician book orders	200
Hospital book orders	500
TOTAL	$35,100
Association services	
American College of Emergency Physicians	$33,160
Maryland Society of Eye Physicians	20,000
TOTAL	$53,160
Education	
Educational grants	$232,981
Corporate/Undistributed	
Physician rehabilitation reimbursement	$80,000
TOTAL REVENUES	$2,833,771
TOTAL EXPENSES	$2,823,354

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The Maryland Medical Journal (MMJ) *is a monthly publication of the Medical and Chirurgical Faculty of Maryland. The journal's goals are educational and informative: the publishing of scientific articles (original research, case studies, and review articles) and other technical information, as well as editorials, letters, special articles (evaluations, position papers, reviews of nonscientific subjects), membership and legislative news, continuing medical education notices, and programs and policies of the faculty.*

- ***Letter of transmittal***—The letter of transmittal, which all authors must sign, should include the full names, degrees, titles, and affiliations of all authors, and the name, address, and phone number of the author to whom reprint requests and correspondence should be sent.

  The letter should include a statement to the effect that all authors have participated in the conception and design of the work and in the writing of the manuscript, and that they take public responsibility for it. The authors should attest to the validity and legitimacy of the data, and acknowledge that they have reviewed the final version of the manuscript and approve it for publication.

  In addition, the letter must include a paragraph that transfers copyright ownership to the *MMJ* in the event that the work is published.

- ***Manuscript preparation***—Manuscripts should be submitted to Editor, *MMJ*, 1211 Cathedral Street, Baltimore, MD 21201-5585. Manuscripts must be original material not previously published and not under consideration by another publication. An abstract of 100 to 300 words is required.

  All material, including references, tables, and legends, must be double-spaced. Pages should be numbered. (All abbreviations should be spelled out on first use.) The original manuscript plus one copy should be submitted on standard (8.5" x 11") bond paper. If at all possible, an IBM-compatible disk should be included, with the manuscript entered in a WordPerfect, Multimate, Wordstar, or ASCII format; the transmittal letter should identify the format used.

- ***References***—References are limited to those citations noted in the text. References should be numbered consecutively as they appear in the text and should be kept to a minimum (fewer than thirty-five). Personal communications and unpublished data are not acceptable. At a minimum, references should include names of all authors, complete title of the article cited, name of journal abbreviated according to *Index Medicus* (if abbreviation is not known, journal name should be spelled out fully), year of publication, volume number, and first and last page numbers. Sample references are as follows:

  1. Stevens MB. The clinical spectrum of SLE. Md Med J 1991; 10:875–85.
  2. Ropes MW. Characteristics, manifestations, and pathologic findings. In: Ropes MD, ed. Systemic Lupus Erythematosus. Cambridge, MA: Harvard University Press. 1976; 50–4.

- ***Tables***—Tables should be typed on separate sheets of paper, be numbered, and have a brief descriptive title. Data presented in tables should be self-explanatory and should supplement, not duplicate, the text; the Editor reserves the right to edit tables. Authors should be sure that statistics are consistent in both tables and text.

- ***Illustrations***—Illustrations include material that cannot be set in type. Photographic material must be submitted as high-contrast, glossy prints. Drawings and graphs must be done professionally in india ink on high-grade white drawing paper or be computer generated. Identification—including figure number, the title of manuscript, the name of corresponding author, and arrow indicating top—should be typed on a gummed label and affixed to the back of each illustration. Legends for illustrations should be typed on a separate page with numbers corresponding to those on the photographs or drawings. Recognizable photographs of patients are to be masked and should carry with them written permission for publication. Cost of printing color photographs must be borne by the author.

- ***Permissions***—Material taken from other sources must be accompanied by written permission from both author(s) and publisher allowing the *MMJ* to reproduce the information/figure.

- ***Editorial responsibility***—All manuscripts are acknowledged upon receipt. They are subject to peer review by an editorial board and, at times, by guest reviewers in appropriate fields of medicine, to determine the originality, validity, and importance of the content and conclusions. Authors are usually notified of the status of their papers (acceptance, revision, or rejection) within 4 to 8 weeks of receipt; however, longer delays are sometimes unavoidable. Reviewers' comments will be returned with rejected manuscripts at the discretion of the Editor. All guest reviewers will remain anonymous.

  Accepted manuscripts become the permanent property of the *MMJ* and are subject to copy editing. (The *Chicago Manual of Style* and the unabridged *Random House Dictionary of the English Language* are used as style guides.) The corresponding author is sent a reprint order form and galley proofs. S(he) then has 48 hours in which to make minor changes and clear all corrections and changes with co-authors; if proofs are not returned by the specified date, they will be considered approved as typeset. ■

Checklist

- ☐ Original manuscript and one copy.
- ☐ IBM-compatable disk in WordPerfect, Multimate, Wordstar, or ASCII.
- ☐ Everything double-spaced.
- ☐ Letter of transmittal, signed by all authors, that includes release of copyright, statement of authorship responsibility, title and affiliation of all authors, and identification and phone number of corresponding author.
- ☐ Abstract of 100 to 300 words.
- ☐ Permission-to-borrow letters for any previously published illustrations or tables

Miscellaneous meetings

Imaging the augmented breast, sponsored by the Baltimore City Medical Society. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. — **Sept. 2**

1993 Med Chi semiannual meeting, at the Sheraton Ocean City Resort and Conference Center, Ocean City, Maryland. Info: Vivian Smith, 410-539-0872 or 800-492-1056. — **Sept. 10–12**

The decade of the brain: An international conference, sponsored by the George Washington University, at the Omni-Shoreham, Washington, DC. 28 Cat 1 AMA/PRA credits. Fee: $550 physicians; $330 residents and fellows; $250 other health professionals. Info: John F. Vargo, 202-994-4285. — **Sept. 11–14**

5th annual trauma conference, sponsored by the Peninsula Regional Medical Center, at the Sheraton Ocean City Resort and Conference Center, Ocean City, Maryland. Info: Darlene Kwiatkowski, 410-543-7328. — **Sept. 16–17**

14th international congress of lymphology, sponsored by the International Society of Lymphology (ISL). Part 1: "Frontiers in Lymphology" at the Hyatt Regency, Baltimore, Maryland. Part 2: "Lymphology in 1993" at the Ramada Renaissance Techworld, Washington, DC. Info: Grace Wagner, program coordinator, 602-626-6118. — **Sept. 20–26**

Congenital heart disease in adolescents and adults, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. — **Sept. 27–29**

Interventional echocardiography: Transesophageal, exercise, pharmacologic, and intravascular, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. — **Sept. 30–Oct. 2**

International liver symposium, sponsored by the George Washington University, at the Marriott Crystal Gateway Hotel, Arlington, Virginia. 14 Cat 1 AMA/PRA credits. Fee: $350. Info: Hattie Johnson, 202-687-8735. — **Oct. 1–3**

Clinical cardiac electrophysiology, pacemakers, and cardioverter-defibrillators, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. — **Oct. 4–7**

Causes of the medical malpractice crisis, sponsored by the Baltimore City Medical Society. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. — **Oct. 7**

Gastroenterology board review course, sponsored by the George Washington University, at the Marriott Crystal Gateway Hotel, Arlington, Virginia. 42 Cat 1 AMA/PRA credits. Fee: $650 physicians; $500 residents and fellows. Info: Daniel E. Reichard, 202-994-4285. — **Oct. 9–13**

Medical oncology board review course, sponsored by the George Washington University, at the Ritz-Carlton, Pentagon City, Virginia. 38 Cat 1 AMA/PRA credits. Fee: $695 physicians; $500 residents and fellows. Info: John F. Vargo, 202-994-4285. — **Oct. 9–13**

Clinical applications of Doppler and transesophageal echocardiography, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. — **Oct. 14–16**

New techniques and concepts in cardiology, sponsored by the American College of Cardiology, at the Hyatt Regency Hotel, Washington, DC. 16 Cat 1 AMA/PRA credits. Info: 1-800-257-4739. — **Oct. 21–23**

Miscellaneous meetings (continued)

Nuclear cardiology: A case study approach, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. — **Oct. 21–23**

Cancer in women conference, at the Greater Baltimore Medical Center (GBMC), Baltimore, Maryland. Info: Celeste Morrissey, 410-828-3670. — **Oct. 21 & 28 and Nov. 4 & 11**

Vascular radiology conference, at the Greater Baltimore Medical Center (GBMC), Baltimore, Maryland. Info: Celeste Morrissey, 410-828-3670. — **Oct. 23**

7th annual national disability management conference and exhibit, sponsored by the Washington Business Group on Health, at the Crystal Gateway Marriott, Arlington, Virginia. Info: Kristina Tanasichuk, 202-408-9320. — **Oct. 25–26**

Topics in clinical rheumatology: An arthritis update for internists, family practitioners, orthopaedists, rheumatologists, other primary care practitioners, and allied health professionals, sponsored by the Arthritis Foundation, Maryland Chapter, at the Stouffer Harborplace Hotel, Baltimore, Maryland. Cat 1 AMA/PRA credits available. Fee: $50. Info: J. Karen Krug, 410-602-0160. — **Oct. 28**

Cases in echocardiography: TEE, Doppler, and stress—Interpretation and clinical decision making for the advanced echocardiographer, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. — **Oct. 28–30**

Cardiology in women, at the Greater Baltimore Medical Center (GBMC), Baltimore, Maryland. Info: Celeste Morrissey, 410-828-3670. — **Oct. 29**

The future of integrated health care systems, sponsored by The Healthcare Forum and Inova Health System, and in part by a grant from KPMG Peat Marwick, at the Hyatt Regency, Reston, Virginia. 13.25 Cat 1 AMA/PRA credits. Info: 415-421-8810. — **Nov. 8–11**

Advanced echocardiography: Case studies and concepts, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. — **Dec. 1–3**

Continuously throughout the year — **Dec. 13–15**

Fluorescein angiography conference, sponsored by the Retina Center, St. Joseph Hospital, Baltimore, Maryland, first and third Mondays of each month; 8:00-9:00 am. Fee: none. Info: R. Classon, 410-337-4500.

The Johns Hopkins Medical Institutions

All courses at the Thomas B. Turner Building unless otherwise indicated. For information on continuing medical education activities, contact the Office of Continuing Education, 720 Rutland Ave., Baltimore, Maryland 21205 (410-955-2959).

Pediatrics for the practitioner—Update 1993. Cat 1 AMA/PRA credits available. — **Sept. 9–10**

7th annual core content of emergency medicine: A comprehensive review, at the Marriott Hotel, Baltimore-Washington International Airport, Baltimore, Maryland. Cat 1 AMA/PRA credits. Fee $995. — **Sept. 10–16**

The Johns Hopkins Medical Institutions (continued)

22nd annual diagnostic ultrasound in gynecology and obstetrics and abdomen, at the Stouffer Harborplace Hotel, Baltimore, Maryland. 16.5 Cat 1 AMA/PRA credits. Fee: physicians: 3 days, $400; 2 days, $300; 1 day, $150. **Sept. 17–19**

Rising to the challenge: Crisis intervention in the critical care setting. Cat 1 AMA/PRA credits available. Fee: $75. **Oct. 4**

19th annual topics in gastroenterology and liver disease. Cat 1 AMA/PRA credits available. Fee $495 physicians; $250 residents and fellows. **Oct. 6–8**

35th annual Emil Novak memorial course. 45 AMA/PRA credits; 53 ACOG cognates. Fee: $675 physicians; $475 residents, fellows, and allied health professionals. **Oct. 18–23**

Diabetic retinopathy. 8 Cat 1 AMA/PRA credits. Fee: $200 physicians; $100 residents, fellows, and allied health professionals. **Oct. 29**

Practical management of the uveitis patient. 8 Cat 1 AMA/PRA credits. Fee: $200 physicians; $100 residents, fellows, and allied health professionals. **Oct. 30**

Hemodynamic monitoring, patient care and pulmonary artery catheterization—A hands-on course. 14 Cat 1 AMA/PRA credits. Fee $575. **Oct. 30–31**

Ethics and politics related to clinical trials. Cat 1 AMA/PRA credits available. Fee: TBA. **Nov. 3–4**

Progress in pediatrics. 11 Cat 1 AMA/PRA credits. Fee: $140 physicians; $80 residents and fellows. **Nov. 5–6**

Update on sinusitis. Cat 1 AMA/PRA credits available. Fee: TBA. **Nov. 8**

Continuously throughout the year

Visiting preceptorship in pediatric critical care medicine. Ongoing five-day preceptorship by appointment. 40 Cat 1 AMA/PRA credits. Fee: $600.

The department of radiology and radiological sciences offers several courses in abdominal and obstetrical ultrasound. Info: P. Williams, 410-955-3169.

Visiting physicians. Offered throughout the year for experience in the lab and participation in read-in sessions; by appointment only. 40 Cat 1 AMA/PRA credits. Fee: $500.

Johns Hopkins medical grand rounds. Accredited audiovisual continuing education series of case discussions for clinicians; 30 topics per year in five bimonthly programs. Individual and group subscriptions. 40 Cat 1 AMA/PRA credits. Info: 410-955-3988.

University of Maryland

For each course, additional information may be obtained by contacting the Program of Continuing Education, University of Maryland School of Medicine, Room 14-011, BRB, 655 W. Baltimore St., Baltimore, Maryland 21201 (410-328-3956) or by calling the phone number listed after a specific program. FAX 410-328-3103.

Cardiovascular risk factors in the elderly—medical and pharmacologic management, at the Baltimore Grand, Baltimore, Maryland. 7 Cat 1 AMA/PRA credits. Fee: $60 physicians. Info: Reba Cornman, 410-706-4327. **Oct. 5**

William Donald Schaefer - Governor of Maryland

DHMH Maryland Department of Health & Mental Hygiene

Nelson J. Sabatini - Secretary
Department of Health & Mental Hygiene

J. Mehsen Joseph, PhD - Director
Community Health Surveillance & Laboratories Admin

Ebenezer Israel, MD, MPH- Director
Epidemiology & Disease Control Program

EPIDEMIOLOGY & DISEASE CONTROL PROGRAM
201 W. Preston Street, Baltimore, Maryland 21201 (410)225-6700

September, 1993

Selected Communicable Diseases in Maryland in 1992 - Continued

MALARIA (61)

1.3/100,000 (U.S. 0.4/100,000)

The number of cases by jurisdiction is shown in Table 1 (see July, 1993 issue). Prince George's County had the highest incidence rate per 100, 000 population (3.8), followed by the rate in Montgomery County (2.7).

The male to female ratio was 1.3:1.0. The ratio of whites to non-whites was 0.1:1.0. Ages ranged from 2 to 66 years (median 31, mean 29 years). The most affected age group was 30 to 39 years (26 cases).

The reported malaria species were: *Plasmodium falciparum* (25), *P. vivax* (12), *P. malariae* (3), *P. ovale* (2), and unspecified (19).

All malaria cases in Maryland were imported either by persons who travelled abroad (49.1%) or by recent immigrants (50.9%). *P. falciparum* and *P. ovale* malaria were acquired in Africa, *P. vivax* in India, Africa, and Latin America, and *P. malariae* in India.

A recent review of 125 malaria cases reported in Maryland in 1991 and 1992 disclosed that 40% of cases had a history of previous malaria; 24% of the cases had received prophylaxis but only a quarter of these had received the appropriate regimen.

MEASLES (17)

0.4/100,000 (U.S. 0.9/100,000)

In 1992, reported measles decreased ten-fold from 1991 when 178 cases were reported. The trend in the past 10 years is presented in Figure 9. Only 5 counties reported cases (see Table 1, July 1993 issue); 76.5% were residents of Montgomery (7 cases) and Prince George's (6 cases) counties. The highest incidence rates per 100,000 population were also noted in Montgomery (0.9) and Prince George's (0.8) counties. Four cases in Montgomery County were part of an outbreak in a high school. Most of the cases had onset of illness in April and May.

The male to female ratio was 0.5:1.0; the ratio of whites to blacks was 1.3:1.0. Ages ranged from 7 months to 58 years (median 16 years). Two (11.8%) were children 0 to 15 months of age, 4 (23.5%) were 16 months to 4 years old, 4 (23.5%) were 5 to 19 years of age, and the rest (7) were adults. The 4 cases, 16 months through 4 years of age, had not been vaccinated against measles.

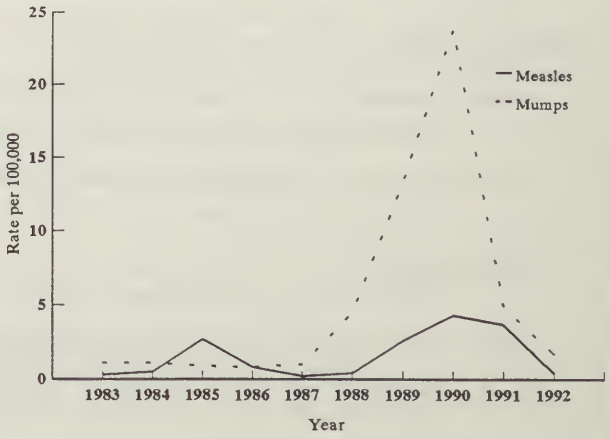


Fig 9. Measles and mumps. Incidence rates, Maryland, 1983-1992.

Nine (52.9%) of the cases were out-of-state or international importations. Two of the 6 adult cases were nurses who were exposed at work.

MENINGITIS, VIRAL (ASEPTIC) (223)

4.6/100,000 (U.S. 4.8/100,000)

Aseptic meningitis declined by 33% from 1991 (333 cases). The number of cases by jurisdiction is shown in Table 1 (see July, 1993 issue). Almost half (48.9%) of the cases had onset of illness in July, August, and September.

The male to female ratio was 1.2:1.0. The ratio of whites to blacks was 2.4:1.0. Children under 1 year of age (41 cases, including 13 newborns), had the highest rate per 100,000 population (62.5). The rates among age groups 5 to 9 years (6.6) and 1 to 4 years (6.4) followed.

The etiology was reported for only 15 cases: 5 unspecified enterovirus, 5 echovirus, 4 herpes virus, and 1 lymphocytic choriomeningitis virus.

MENINGOCOCCAL DISEASE (31)

0.6/100,000 (U.S. 0.8/100,000)

The distribution of cases by jurisdiction is shown in Table 1 (see July, 1993 issue). More than half (51.6%) were reported by Anne Arundel (6 cases), Montgomery (5), and Prince George's (5) counties. No cluster or seasonality was observed.

The male to female ratio was 1.2:1.0. The ratio of whites to blacks was 2.2:1.0. Ages ranged from 4 months to 78 years (median 9 years). The highest incidence rate per 100,000 population (4.6) was observed among children under 1 year of age, followed by the rate (2.7) among 1 to 4 years old.

Nineteen (61.3%) patients presented with meningitis, 11 (35.5%) with meningococcemia, and 1 (3.2%) with arthritis. The *Neisseria meningitidis* serogroup was reported for 15 cases as follows: 9 B, 4 Y, 2 W135, and 1 C. The outcome was known for 28 cases (90.3%) : 2 died for a case fatality rate of 7.1%.

MUMPS (84)

1.7/100,000 (U.S. 1.0/100,000)

The trend of decline for mumps which started in 1991 (236 cases) continued through 1992 (Figure 9). The number of cases in 1992 by jurisdiction is shown in Table 1 (see July, 1993 issue).

The male to female ratio was 1.2:1.0. Fifty-one (60.7%) of the cases were school-age children, 5 to 18 years of age.

PERTUSSIS (52)

1.1/100,000 (U.S. 1.6/100,000)

Pertussis decreased by 14.8% from 1991 (61 cases) following 2 years of consecutive decline. The trend in the past 10 years is presented in Figure 10. The number of cases by jurisdiction in 1992 is shown in Table 1 (see July 1993, issue).

The male to female ratio was 0.7:1.0. The ratio of whites to non-whites was 2.5:1.0. Ages ranged from 1 month to 50 years (median 3.5 years). The highest age specific incidence rate per 100,000 population (27.4) occurred among children under 1 year of age (18 cases, including 3 children under 28 days old), followed by the rates in age groups 10 to 14 years (2.8) and 5 to 9 years (1.4).

The following symptoms were reported: paroxysmal cough in 46 (88.5%), post-tussive vomiting in 29 (55.8%), whoop in 25 (48.1%), cyanosis in 12 (23.1%), and apnea in 11 (21.2%) cases. No deaths were reported.

Seventeen cases (32.7%) were laboratory confirmed by culture, 16 (30.8%) were DFA positive, 11 (21.2%) were both culture and DFA positive, and 19 (36.5%) were not tested but were epidemiologically linked to confirmed cases.

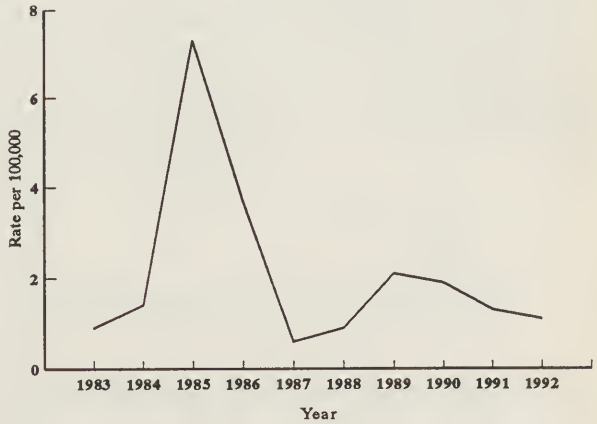


Fig 10. Pertussis. Incidence rates, Maryland, 1983-1992.

ANIMAL RABIES (553)

Laboratory confirmed animal rabies decreased by 4.5% from 1991 (579 cases) following 3 consecutive years of increase. It should be noted that these numbers, based only on the animals submitted for testing, do not reflect the full extent of infection especially within wild animal populations.

In 1992, 10.8% (553/5106) of laboratory examined animals were found to have rabies. The trend of animal rabies in Maryland in the past 12 years since the beginning of the current terrestrial animal (other than bats) epizootic, is reflected in Figure 11. Since the first case in 1981 in Allegany County, raccoon rabies has spread to all Maryland counties, except Somerset and Worcester on the lower Eastern Shore. The number of reported cases in 1992 by jurisdiction is shown in Table 1 (see July, 1993 issue). Dorchester (55 cases) and Wicomico (33 cases) were the only newly involved counties in 1992. Frederick County with the highest number of cases (79, 14.3%) had a third cyclic peak following an initial peak in 1984 (247) and a second peak in 1988 (66). In Maryland, cyclic peaks usually occur at 4 to 6 year intervals. Talbot County, the county newly involved in 1991 (54 cases), reported 63 cases (11.4%) in 1992.

Raccoons (413, 74.7%) were the most frequently reported rabid animal, followed by skunks (65, 11.8%), foxes (27, 4.9%), cats (22, 4.0%), bats (17, 3.1%), dogs (2, 0.4%), and horses (1, 0.2%). Rabies among dogs and cats (24 cases) accounted for 4.5% of the total, an in-

crease of 3.1% from 1991 (17 cases). The number of rabid cats (22) was the highest number ever reported in Maryland.

No human rabies has occurred in Maryland during this epizootic. The last human rabies death was in 1976, resulting from a bat bite.

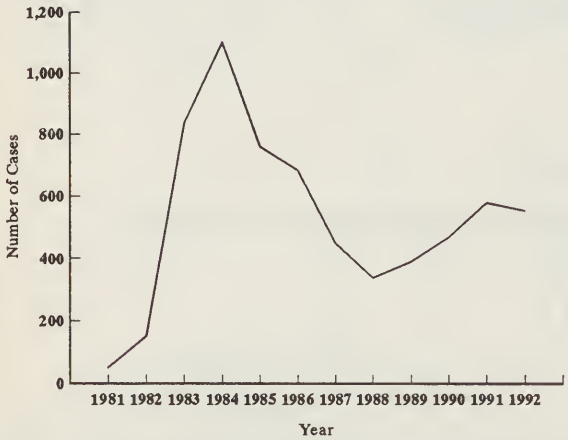


Fig 11. Animal rabies. Cases reported, Maryland, 1981-1992.

ROCKY MOUNTAIN SPOTTED FEVER (16)

0.3/100,000 (U.S. 0.2/100,000)

Rocky Mountain spotted fever declined 27.3% from 1991 to a record low. The number of cases in the past 5 years and by jurisdiction in 1992 is shown in Table 1 (see July 1993, issue). Only 1 case was reported from the Eastern Shore (Talbot County) and none from the counties west of Baltimore County. Five cases (31.3%) occurred in Baltimore County.

Onsets of illness were in April through October (peak month was July with 6 cases). Ages ranged from 4 to 60 years (median 28.5 years). The highest incidence rate per 100,000 population (1.1) was observed in children 5 to 9 years of age.

Eleven (68.8%) patients had rash, including 7 with rash on the palms and/or the soles; 4 (25.0%) confirmed cases and 1 probable case did not have a rash. Five (31.3%) patients required hospitalization. No deaths were reported.

Nine patients (56.3%) had tick bite, 5 (31.3%) had visited tick infested areas, 1 (6.3%) had no history of exposure, and 1 had no exposure information available.

RUBELLA (5)

0.1/100,000 (U.S. 0.1/100,000)

An outbreak of rubella in May occurring in an adult day care center involved 7 persons (4 staff members and 3 clients). Five of the cases were residents of Maryland, and 2 were from Pennsylvania.

The ages of the 7 cases ranged from 8 to 42 years; 6 were female and 1 was male. Two of the confirmed cases had documented evidence of prior rubella immunity. The source of infection was not identified. There was no spread in the community.

No congenital rubella syndrome was reported in Maryland in 1992.

SALMONELLOSIS (1021)

21.1/100,000 (U. S. 16.0/100,000)

The decrease by 19.1% from 1991 (1262 cases) continued the trend of decline of salmonellosis which followed the peak year 1987 when 1810 cases were reported (Figure 12). The number of cases by jurisdiction in 1992 is shown in Table 1 (see July, 1993 issue). Nine outbreaks involving 196 cases (88 of whom were laboratory confirmed and therefore included in the 1992 total) were reported by 8 counties. The peak months were August (148 cases) and July (130 cases).

The male to female ratio was 1.0:1.0. Among the 681 (66.7%) persons for whom the race was known the ratio of whites to non-whites was 1.2:1.0. Infants, under 1 year of age, including 10 under 28 days old, accounted for 162 (15.9%) cases, and had the highest incidence rate per 100,000 population (246.9), followed by the rates in age groups 1 to 4 years (56.3) and 5 to 9 years (16.9). Among adults the highest rate (15.4) was in age group 30 to 39 years.

Of the 730 (71.5%) isolates for which serotypes were available, 295 (40.4%) were *S. enteritidis* (compared to 30.9% and 37.1% in 1991 and 1992, respectively), 154 (21.1%) *S. typhimurium,* 50 (6.8%) *S. heidelberg,* 35 (4.8%) *S. hadar,* 28 (3.8%) *S. newport,* 15 (2.1%) *S. agona,* 12 (1.6%) *S. derby*, 11 (1.5%) *S. infantis,* and 130 (17.8%) other serotypes. Five of the 9 outbreaks were caused by *S. enteritidis*, 2 by *S. typhimurium,* and 1 by *S. newport.*

SHIGELLOSIS (430)

8.9/100,000 (U.S. 9.4/100,000)

Shigellosis increased 66.7% from 1991 (258 cases). The trend in the past 10 years is presented in Figure 12. The number of cases by jurisdiction in 1992 is shown in Table 1 (see July, 1993 issue). Seven outbreaks (compared to 3 in 1991) involving 103 cases (41 of whom were laboratory confirmed and therefore included in the 1992 State total) were reported by 5 counties.

The majority of cases (61.3%) occurred in July through November. The male to female ratio was 1.0:1.0. The ratio of whites to non-whites was 0.6:1.0; the race of 136 (31.6%) was unknown. The highest incidence rates per 100,000 population were noted in age groups 1 to 4 years (45.3), 5 to 9 years (25.5), and among infants under 1 year of age (13.7).

Of the 389 (90.5%) isolates for which species was known, 341 (87.7%) were *S. sonnei*, 47 (12.1%) *S. flexneri*, and 1 (0.3%) *S. boydii*. All 7 reported outbreaks were caused by *S. sonnei*. All occurred in child care settings in contrast with 1991 when none were associated with child care facilities.

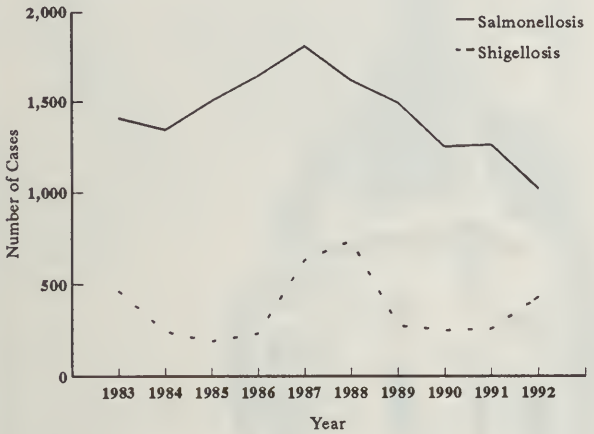


Fig 12. Salmonellosis and shigellosis. Cases reported, Maryland, 1983-1992.

SYPHILIS, PRIMARY AND SECONDARY (590)

12.2/100,000 (U.S. 13.6/100,000)

In 1992, primary and secondary (P&S) syphilis decreased 41.9% from 1991 (1016 cases). Figure 13 shows the trend of P&S syphilis in Maryland in the past 10 years. The number of cases by jurisdiction in 1992 is presented in Table 1 (see July, 1993 issue). Baltimore City (188 cases) and Prince George's County (182 cases) reported 46.8% and 45.3% of all cases, respectively.

The male to female ratio was 1.0:1.0. Seventy-four percent of the cases were black. The most affected age group (25 to 34 years) contributed 45% of all cases.

Since 1988, all P&S syphilis and early latent syphilis patients seen in local health departments' STD clinics have been offered testing for HIV. The percent of co-infection in those tested was 17.7% (66/372) in 1988, 16.0% (96/601) in 1989, 7.1% (69/974) in 1990, 10.8% (94/871) in 1991, and 11% (67/624) in 1992.

Congenital syphilis (62 cases) increased 14.8% from 1991 (54 cases). The following jurisdictions reported cases: Prince George's (27), Baltimore City (26), Montgomery (4), Wicomico (2), Anne Arundel (1), Charles (1), and Dorchester (1). The cases in Prince George's County decreased 27% from the previous year, while reported congenital syphilis in Baltimore City increased 190% from 1991 (9 cases). It is believed that the increase in Baltimore City is due to better ascertainment of cases after the adoption of the CDC's new congenital syphilis definition, rather than an actual increase in cases.

TUBERCULOSIS (442)

9.1/100,000 (U.S. 10.5/100,000)

Tuberculosis declined slightly from 1991 (451 cases). The number of cases by jurisdiction is shown in Table 1 (see July, 1993 issue). Baltimore City reported 28.7% of all cases, followed by Montgomery (21.5%) and Prince George's (19.9%) counties.

The ratio of males to females was 1.4:1.0. The ratio of whites to non-whites was 0.4:1.0. There were 27 (6.1%) cases in children under the age of 15 years; 130 (29.4%) were 65 years old and older. More than a quarter (122 cases, 27.6%) were born in foreign countries, including 80 who were born in Asia. Twenty-eight (23%) of the foreign born were refugees.

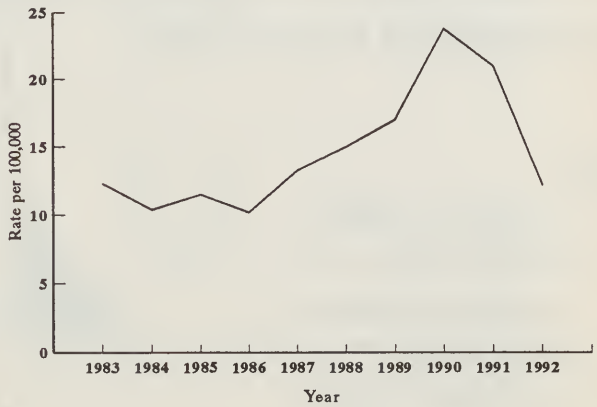


Fig 13. Primary and secondary syphilis. Incidence rates, Maryland, 1983-1992.

A match of tuberculosis and AIDS registries for 1992 identified 60 (13.6%) persons with both diseases (an increase from 36 (8.0%) in 1991, and 41 (10.7%) in 1990). Between 1978 and 1992, 179 such cases have been identified. Strains of drug resistant *M. tuberculosis* were noted in 39 (8.8%) patients of which 4 were resistant to at least INH and rifampin.

TYPHOID FEVER (7)

0.1/100,000 (U.S. 0.2/100,000)

Typhoid fever was reported from Montgomery (3), Prince George's (3), and Howard (1) counties. The male to female ratio was 0.4:1.0. Four cases were Asian, 2 Hispanic, and 1 was black.

Ages ranged from 3 to 59 years (median 11 years). All patients recovered. The cases were imported from India (3), Pakistan (1), Ghana (1), Ecuador (1) and the Philippines (1).

Corrections: In Table 1 in the July, 1993 issue, the number of typhoid fever cases should read as follows: Montgomery County - 3, Prince George's County - 3, and the total - 7.

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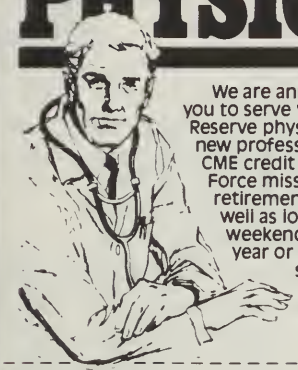
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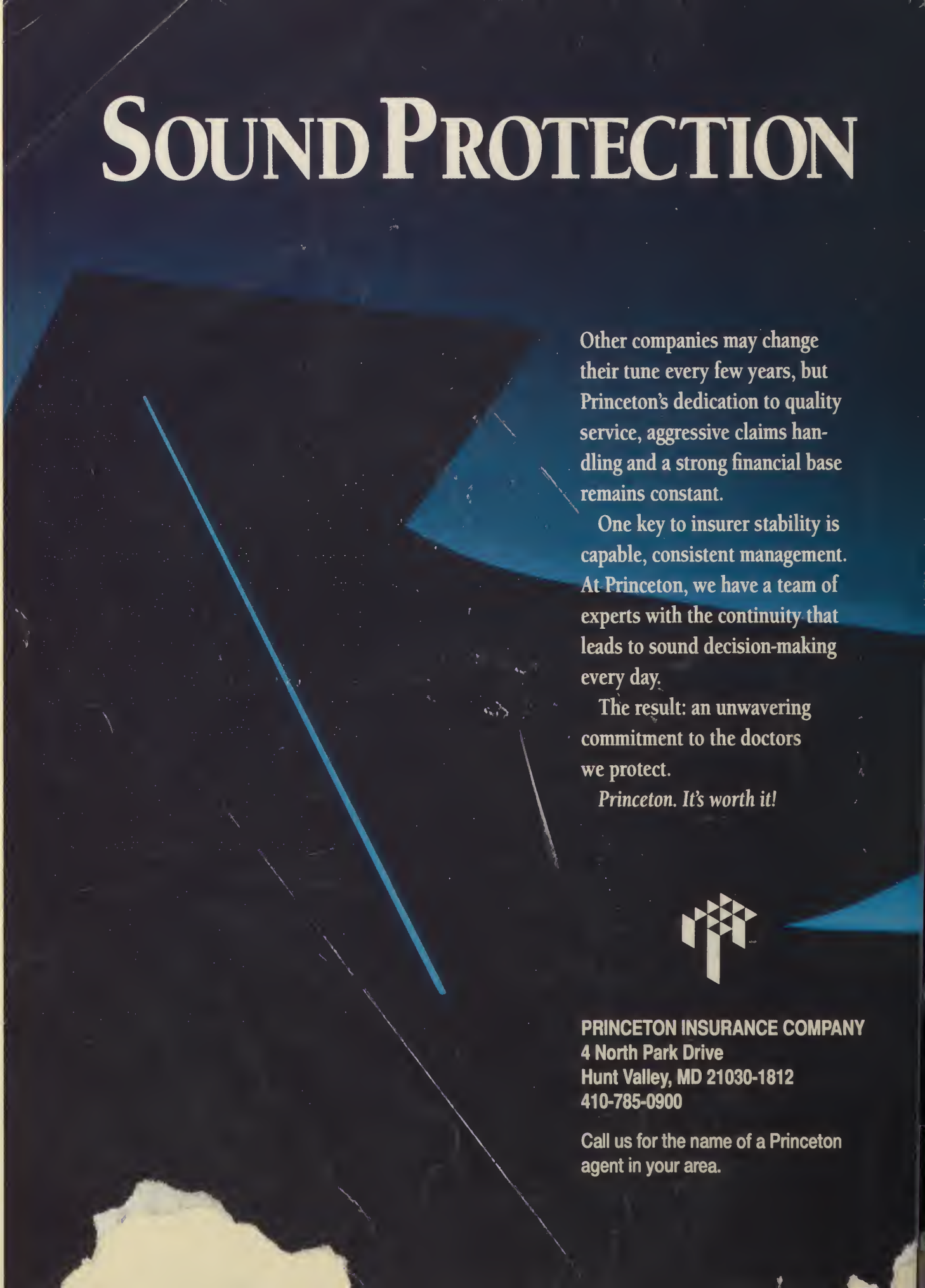
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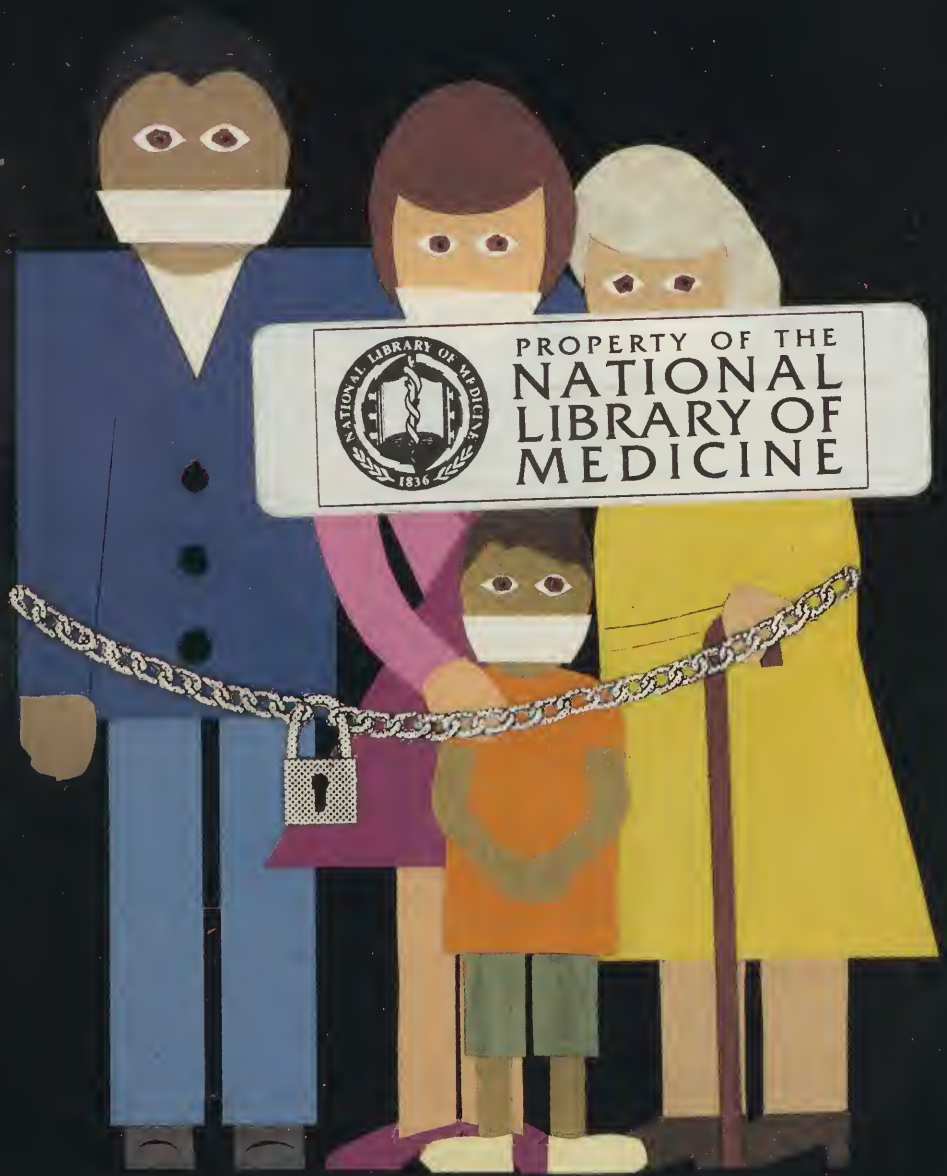
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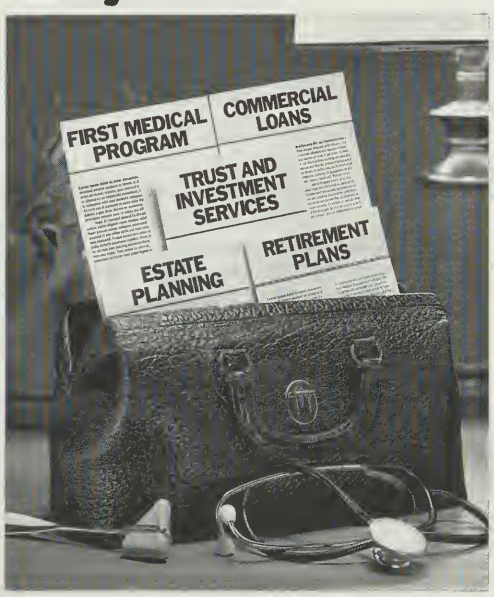
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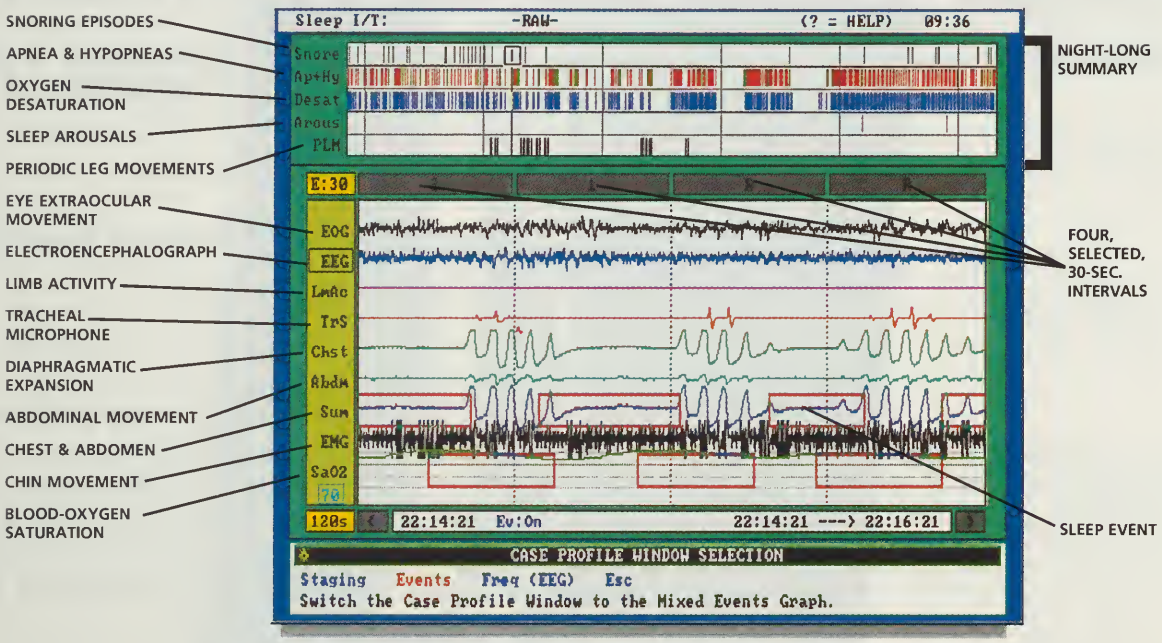
Cover concept and execution: Virginia Carter

On the cover: In recognition of October as Domestic Violence Awareness Month, the cover features the theme for the Maryland Physicians' Campaign Against Family Violence, "Unlock the Silence: Trust is the Key." For more information, see the Chief Executive Officer's Newsletter.

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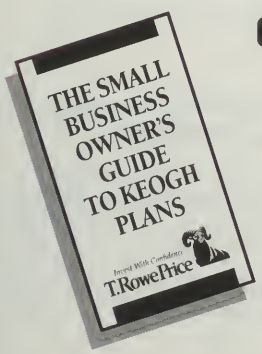
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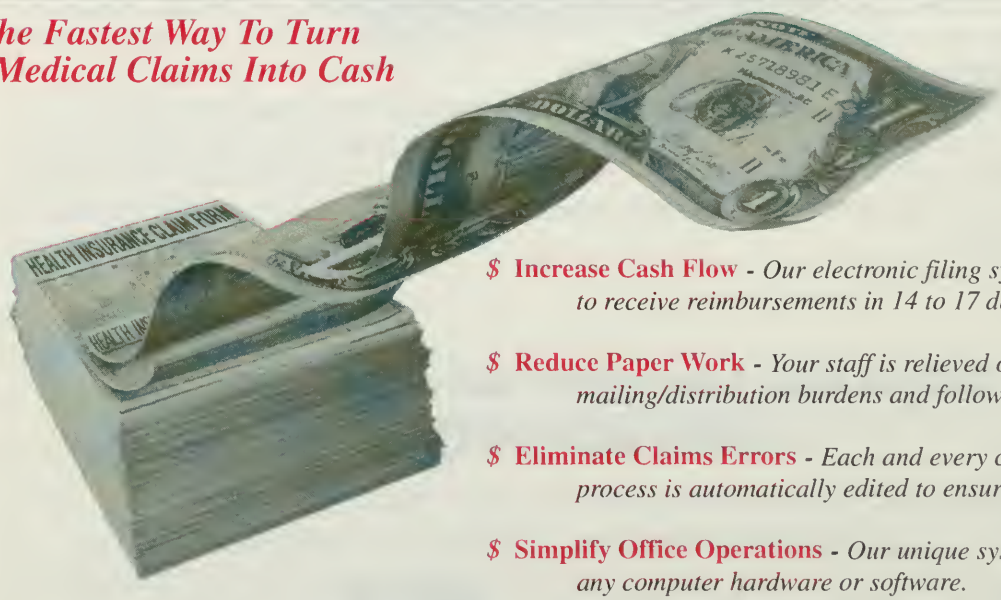
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President's Western Regional Conference

Thursday, November 11, 1993
Sheraton Hotel, Hagerstown, Maryland

This conference is for members in Garrett, Allegany, Washington, Frederick, and Carroll counties. Conference topics will include an update on legislative issues, Medical Mutual Liability Insurance Society of Maryland, Health Care Access and Cost Commission, Maryland Medical Political Action Committee, Medicare reimbursement, and Auxiliary activities. The meeting will also feature a one-hour continuing medical education presentation on:

"Pearls" of Rheumatology

Speaker: Ira T. Fine, M.D., chief, Division of Rheumatology, Sinai Hospital, and instructor of medicine, the Johns Hopkins University School of Medicine

Objective: Participating physicians will be aware of the different types of arthritis, appropriate diagnostic approaches, and appropriate therapeutic interventions.

CME credit: 1.0*

For more information about this conference, contact Joan Mannion at 410-539-0872 or 1-800-492-1056.

*The Medical and Chirurgical Faculty of Maryland is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor continuing medical education for physicians.

The Medical and Chirurgical Faculty designates this continuing medical education activity for 1 credit hour in Category 1 of the Physician's Recognition Award of the American Medical Association.

ERISA Reform

Section 4301 of the Omnibus Budget Reconciliation Act of 1993 (OBRA 93) contains provisions to prohibit benefits discrimination against adopted children. This Employee Retirement Income Security Act (ERISA) reform policy was supported by the AMA and is now the law. Previously, ERISA, the federal statute that controls self-insured benefit plans nationwide, preempted state antidiscrimination laws that barred restrictions on coverage for adopted children.

S&I Services - Cardiologists and Radiologists - Medicare Payment, Pennsylvania Blue Cross/Blue Shield

A cardiologist who performs an interventional procedure, such as an entire coronary and peripheral angiography, angioplasty, or similar diagnostic and/or therapeutic procedure, will receive the supervision and interpretation (S&I) payment. The cardiologist in these situations would be supervising the radiological aspect of these procedures and interpreting the test results. When a radiologist becomes involved after completion of the procedure, the services are essentially quality control, and the radiologist would not be eligible for payment.

If, however, the radiologist is present during the procedure and supervises the radiological aspect, the radiologist, rather than the cardiologist, should submit the claim for the S&I payment.

Med Chi Library is selling 1994 CPTs and ICDs

The Med Chi Library is now selling the most popular formats of the two coding products that detail the codes required by insurance companies. The *CPT 94* is available in the traditional softbound version, including self-adhesive page tabs and a clinical examples supplement. This year's *CPT* reflects over 790 additions, revisions, and deletions. The library also stocks the *ICD-9-CM 1994* office edition published by PMIC, with volumes 1 and 2 bound in one book in the same convenient size as the *CPT*. The PMIC version features color coding, thumb indexing, and flags denoting fifth digits needed.

The cost for the *CPT* is $36.00 ($38.00 if shipped). The cost for the *ICD* is $40.00 ($45.00 if shipped). To order, please send a check or money order made payable to the Med Chi Library, to Rosalind Ellen, 1211 Cathedral Street, Baltimore, MD 21201. Orders must be prepaid and will generally be filled within 48 hours.

Physician Rehabilitation Committee is holding its Fourth Annual Conference on Addiction

The Fourth Annual Conference on Addiction is being held Saturday, December 11, 1993, at the Sheraton International Hotel BWI Airport from 7:30 a.m. to 6:00 p.m. Topics will include the biomedical aspects of addiction, nicotine addiction, the nature and present status of drug abuse treatment, the need for greater access to treatment, the future of drug control policy in America, helping the helpers, and heroin and other opiods; use and abuse.

Registration fees are: $60 - Med Chi member, $100 - nonmember physician/Ph.D., $40 - allied health professionals, and no charge for medical students or medical residents. (Fee includes buffet lunch.) For additional information, or to register, see page 1032 of this issue of the *Maryland Medical Journal*, or call (410) 962-5580 or 1-800-992-7010.

1993-1994 Med Chi Directory coming in November

The *1993-1994 Med Chi Directory* will be mailed to members with the November issue of the *Maryland Medical Journal*. Nonmembers may purchase a copy for $250. Please contact Wanda Griebel at (410)539-0872 or 1-800-492-1056.

Member Address Changes Must Be Directed to Membership Department

Please note that notifying a committee staffperson of an address change for the purpose of your committee correspondence does not correct your address in the Med Chi membership database. If your address changes, please notify Wanda Griebel in the Membership Department at (410)539-0872 or 1-800-492-1056.

Med Chi Auxiliary donates computer to the Heartly House

Georgia Lizas, president of the Med Chi Auxiliary; Barbara Foris, president of the Auxiliary to the Frederick County Medical Society; and Ching Barretto, the Harford County State Health Projects chairperson, recently presented a computer to Sue Hecht, executive director of the Heartly House in Frederick County. The Heartly House provides shelter services; housing, job, and medical community referrals; crisis intervention; and legal services.

Physicians Needed for Doctor of the Day Program

Med Chi needs physicians to volunteer to be a "Doctor of the Day." When the Maryland General Assembly convenes in Annapolis for its 1994 session, Med Chi will be there. Since 1964, Med Chi has staffed the first aid facility operated during the 90-day legislative session. Come join us at the state

capitol building, see the laws being made first hand. One doctor a day is all that is needed to care for the public, the legislators, and their staffs.

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Joyce Yensen
Doctor of the Day Program
Med Chi
1211 Cathedral Street
Baltimore, MD 21201-5585

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Specialty: _____

Office Address: _____

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Phone #: _____

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Tuesday - Friday sessions are from 9 a.m. – 5 p.m.

Dates I can serve:

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Medicare Medical Policies

Beginning on page 1037 of this issue of the journal, there are three Medicare medical policies. Please review these policies on plastic surgery, erythropoietin/EPO/Epoetin alfa/PROCRIT/epogen, and mammography, and detach them for your records.

President's letters

Directly following this *Chief Executive Officer's Newsletter* are two president's letters. The first letter highlights the Physicians' Campaign Against Family Violence, an initiative being sponsored by the Maryland Alliance Against Family Violence. Following Dr. Snyder's letter, Joanne Tulonen, executive director of the alliance, provides details on Med Chi's involvement in this important educational endeavor.

The second president's letter summarizes the discussions on health system reform at two recent AMA-sponsored meetings. Subsequent pages include a Med Chi statement on the Clinton Health Security Act and information on how the Clinton Health Plan will affect the Maryland Health Care and Insurance Reform Act of 1993 (HB 1359).

Carrier Advisory Committee meetings

Members of the Carrier Advisory Committee are encouraged to attend the next meeting of the committee on December 15, 1993.

Angelo J. Troisi, F.A.C.H.E.
Chief Executive Officer

Med Chi would like to thank the following companies for exhibiting at the 1993 Med Chi Semiannual Meeting:

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In addition, Med Chi would like to extend a special thanks to the following sponsors for their support of the 1993 Med Chi Semiannual Meeting:

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Medical
and Chirurgical Faculty
of Maryland

President's Letter

Prepared by the President of the Medical and Chirurgical Faculty of Maryland as a service to members

Dear Colleague:

The cover of this month's *Maryland Medical Journal* highlights the Physicians' Campaign Against Family Violence, which is an educational program that will focus on the vital role physicians can play in breaking the cycle of family violence through the physician/patient relationship. The program will target three areas of family violence: domestic violence—also known as spouse or partner abuse—child abuse, and elder abuse.

Family violence cuts across all social and economic classes, races, and age groups. As president of Med Chi, I am proud to join with the Maryland Alliance Against Family Violence in this exciting new initiative.

The theme of this campaign is "Unlock the silence. Trust is the key." The goal of the program is to unlock the silence that frequently surrounds family violence by educating physicians about the prevalence of family violence and helping them identify, diagnose, intervene with, and refer victims. Promulgating legislation that will make it easier for victims and physicians to report abuse will also be addressed.

The physicians' campaign is not a solo endeavor but the joint effort of over 20 state and health organizations. This collaborative effort includes physicians, nurses, social workers, educators, academicians, experts, lawyers, auxilians, and other interested individuals.

In the months to come, Med Chi will be apprising you of the progress of the campaign and notifying you about educational opportunities. Help Med Chi take the lead in alleviating and eradicating family violence by being an active participant in the physicians' campaign. Together we can make a difference in the health and well-being of our patients.

Sincerely,

Joseph Snyder, M.D.
President

Med Chi launches a major family violence prevention initiative

Joanne Tulonen

Ms. Tulonen is executive director of the Maryland Alliance Against Family Violence.

In September, the Medical and Chirurgical Faculty of Maryland (Med Chi) and the Maryland Alliance Against Family Violence launched a major family violence prevention initiative in Maryland. A joint task force on family violence was formed under the auspices of Med Chi's Public Health and Public Relations committees in recognition of the fact that the Maryland medical community needed a coordinated response to the increasing awareness of family violence as a public health issue.

The Family Violence Task Force provides an opportunity to develop materials for physicians, launch a statewide training program, and effectively implement protocols recommended by the American Medical Association (AMA) and mandates issued by the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO). The task force is cochaired by Martin P. Wasserman, M.D., and Hiroshi Nakazawa, M.D. Med Chi has donated $25,000 in start-up funds for the Maryland Physicians' Campaign Against Family Violence, which will be directed by the task force. The campaign's theme is "Unlock the silence: Trust is the key."

The problem

Each year, an estimated 20 to 25 million Americans are directly affected by family violence as victims, witnesses, or perpetrators. Secondary victims are all of us who pay the tremendous social costs in terms of suicides, divorces, teen pregnancy, and crime, as well as the enormous economic expenditures that family violence costs the health care system, businesses, the legal system, social services, the courts, prisons, and drug and alcohol programs.

Every day across the state of Maryland, thousands of family violence victims present themselves to physicians for care. These victims appear at hospitals, clinics, and physicians' offices with broken bodies and broken spirits. Due to the lack of family violence information and training traditionally offered to physicians and nurses, many patients are unidentified as victims.

In addition to the lack of training, there is another barrier to overcome. It is the silence that surrounds and perpetuates this issue. This silence, caused by a variety of beliefs and fears, contributes to the suffering of victims and to the social and economic costs we all pay. To its credit, Med Chi has decided to end that silence.

Formation of the task force

The 25 members of the Family Violence Task Force represent major Maryland medical and health-related organizations including the Maryland Chapter, the American College of Emergency Physicians; the Maryland Academy of Family Physicians; the Maryland Society of Internal Medicine; the Obstetrical and Gynecological Society of Maryland; the Maryland Chapter, American Academy of Pediatrics; the Maryland Nurses Association; the Maryland Emergency Nurses Association; the Maryland Hospital Association, Maryland Chapter; the National Association of Social Workers, Maryland Chapter; the Society for Hospital Social Work Directors; the University of Maryland School of Medicine; the Johns Hopkins Injury Prevention Center; the Maryland Department of Human Resources and the Department of Health and Mental Hygiene; and advocates from groups concerned with domestic violence, child abuse, and elder abuse.

The task force, convened in September, plans to complete its work in 18 months. Its mission is

to design a campaign to educate physicians about the prevalence of family violence, its impact on the health and well-being of victims, and the necessity of effective intervention by the medical community. The task force will coordinate statewide physician training and investigate the need to review Maryland family violence statutes.

Scope of the campaign

The Maryland Physicians' Campaign Against Family Violence is a statewide effort to increase awareness of family violence as a public health issue and to enlist the medical community's assistance in the elimination of family violence. The campaign has three primary goals. The first is to develop protocol and educational materials on domestic violence, child abuse, and elder abuse. The second goal is to offer educational conferences on family violence to hospital personnel and physicians and to physicians in private practice. The third goal is to conduct a public education campaign.

Developing training protocols and materials. Several states have produced educational materials on family violence. After careful review, it was decided to use the materials developed by the Ohio Medical Association as the basis for Maryland's physician handbooks.

The Maryland handbooks will use AMA-developed protocols and will provide physicians with information on family violence dynamics, assessment tools, legal and ethical requirements of reporting and documenting abuse, and a referral list for each community. Three physician handbooks on each aspect of family violence—domestic violence, child abuse, and elder abuse—will be provided. Handbooks and other promotional materials will be sent to 7,000 physicians statewide, mainly to family practitioners, obstetricians, pediatricians, and emergency physicians. If additional resources become available, materials will be distributed to a wider audience. The first handbook on domestic violence is scheduled for distribution in January 1994.

Physician education. JCAHO has mandated that hospitals provide their medical staff with training on all aspects of family violence. The task force's objective is to provide the training, with the hospitals' assistance, in a coordinated manner. A task force subcommittee will identify and train teams of advocates and physicians from each county who, in turn, will train medical staffs of local hospitals. Training will take place over the next year on each aspect of family violence, beginning with domestic violence.

The second phase of training will be conducted through a series of conferences sponsored by county medical societies and Med Chi. These conferences will be for physicians in private practice who were not able to attend the local hospital training sessions. Task force members hope the conferences will provide county medical societies and auxiliaries and local family violence advocates an opportunity to network and begin to promote family violence as an important public health issue in their local communities.

Educating the public. With any initiative, public education must be a component. To achieve this end, Med Chi and the Maryland Alliance Against Family Violence will conduct a public relations campaign using traditional and nontraditional methods. The theme, "Unlock the silence: Trust is the key," will be used on all public education materials created by the task force.

The task force plans to submit materials for publication consideration to the *Maryland Medical Journal* in the hopes that a special issue on family violence can be published in the spring of 1994. Also, each task force member will be urged to submit an article to their own organization's publication announcing the task force and the Maryland Physicians' Campaign Against Family Violence.

The alliance received a $35,000 federal grant to develop informational materials to promote family violence as a public health issue in the general population. These materials for victims of family violence will be developed in conjunction with the physicians' campaign. The brochure for victims will provide information on family violence and a resource list, and will encourage victims to trust their physicians and turn to them for help.

The Maryland medical community is to be congratulated for taking a stand on family violence, unlocking the silence, and signaling to the rest of the community that family violence is a serious problem affecting the health and well-being of all family members, as well as having an impact on the entire community. ■

Medical and Chirurgical Faculty of Maryland

President's Letter

Prepared by the President of the Medical and Chirurgical Faculty of Maryland as a service to members

Dear Colleague:

I'm sure that many of you watched President Clinton's speech on September 22 about his proposed Health Security Act. Since then, you have probably seen and heard numerous comments and opinions about it on radio, television, and in the newspaper. There is a great deal of concern among physicians about the plan and what it will mean to patients and the profession. Therefore, I want to inform you of some developments on health system reform that occurred during two recent AMA-sponsored meetings.

On September 29 and 30, I attended the AMA's 1993 Political Education Conference in Washington, DC. This conference gave the medical community an opportunity to discuss various reform proposals with members of the Clinton administration and with Congressional representatives. Conference speakers included Lonnie Bristow, M.D., chairperson, AMA Board of Trustees; James Todd, M.D., AMA executive vice president; Donna Shalala, secretary, Department of Health and Human Services; George Mitchell (D-ME), Senate majority leader; Bob Michel (R-IL); Newt Gingrich (R-GA); Jay Rockefeller (D-WV); and others.

The administration's representatives did not provide much additional insight into the Health Security Act. Ms. Shalala restated some of the plan's major components—health alliances, consumer choice, and malpractice reform. She also said that the plan's tort reform would limit attorneys' fees to one-third of an award. Senator Mitchell talked about the plan's global budget. He said that although the global budget issue will be vigorously debated by Congress, he does not expect the Democratic leadership to change their position on it.

We heard about the Affordable Health Care Now Act of 1993 (HR 3080) from Representative Bob Michel. This bill—one of several alternative reform bills submitted to Congress—was drafted by the House Republican leaders' Health Care Task Force and introduced to Congress on September 16, 1993, by Representative Michel with 105 cosponsors. HR 3080 contains provisions for malpractice reforms, antitrust measures, anti-fraud measures, insurance market reforms, and Medicaid reform. The bill would require employers to offer all employees health insurance coverage; however, it would not require employers to pay any employee premiums.

During the conference, we also discussed the AMA's reform proposal, Health Access America, with various congressional representatives. Through these discussions, we learned that most Republicans oppose the employer mandates proposed in the AMA plan. We also learned that most Republicans are concerned about the new cost of entitlement programs, especially Medicare's prescription drugs benefit and expanded long-term care coverage. They do not think that you can add these new things to the system without adding tremendous cost.

On Saturday, October 2, Med Chi's CEO (Angelo Troisi) and I attended the AMA's Federation Leadership Meeting in Chicago, Illinois. Forty-five states and 17 specialty societies were represented at this meeting, and we shared our concerns regarding the Clinton Health Security Act. Two particular areas of concern—medical education and tort reform—were addressed.

HEALTH SYSTEM REFORM

William Jacott, M.D.,vice chairperson, AMA Board of Trustees, described how the currently proposed Clinton plan will affect medical education. After a five-year transition period, 50% of physicians in residency training must be in primary care. The transition plan requires primary training slots to increase 7% each year, and specialty training slots to decrease 10% each year. The training slots at all medical schools would be allocated by the Department of Health and Human Services based upon recommendations from a new national council on graduate medical education. The plan will also double the number of training positions available for nurse practitioners, nurse midwives, and physicians' assistants. Dr. Jacott stated that the plan would federalize the nation's medical education system. The AMA opposes arbitrary quotas restricting individuals' free choice to pursue their chosen fields.

Frank B. Walker, M.D., member of the AMA's Board of Trustees and the board's Executive Committee, spoke about tort reform. The currently proposed Clinton plan requires patients to submit malpractice claims through an alternative dispute resolution (ADR) system. Suits must include a certificate of merit affidavit that is signed by a medical specialist and states that the care received deviated from established standards. The plan also includes a collateral source rule, a provision for periodic payments, and a cap on attorneys' fees. Most of these elements are already present in Maryland, although the cap on noneconomic damages for wrongful death was overturned recently. In response to the Clinton plan, the AMA is proposing a $250,000 limit on noneconomic damages and more stringent limits on attorneys' fees.

By now, you should have received the AMA's analysis of the Clinton plan, which was sent to every physician in the country. I urge you to look at it and become familiar with the different aspects of this plan. You need to understand the plan so that you can answer your patients' questions about it and become actively involved in shaping the future of health care in America.

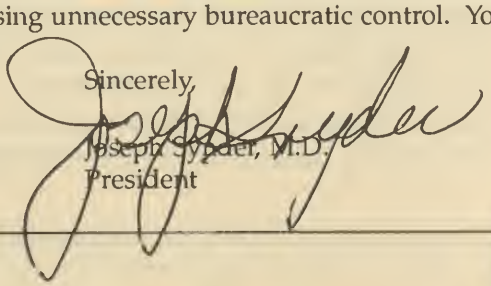
During the upcoming debate on the numerous issues surrounding health system reform, the AMA will be organized medicine's principal voice in Washington. The AMA will continue to analyze various reform plans, testify before congressional and executive branch committees, and provide extensive input to Congress and the administration on specific reform approaches. If you are not already an AMA member, I urge you to support organized medicine by joining today.

Med Chi will be your principal voice in Maryland and will continue working with state legislators to develop meaningful reform on both the state and federal level. Your Med Chi leadership will be going to the component societies and the president's regional meetings to discuss health system reform. Please use these opportunities to let Med Chi know your concerns and questions. The date for the next regional meeting is:

President's Western Regional Conference
Thursday, November 11, 1993, 4:30 p.m., Sheraton Inn, Hagerstown, Maryland

The next few months will be a critical time for physicians. This is a time to stay united. The future of the profession and of patients' security can only be maintained if all physicians stand together. Med Chi and the AMA want to send Congress a message that they are speaking for the physicians in the country who want workable health system reform that does not jeopardize patient care by imposing unnecessary bureaucratic control. Your support in this endeavor is needed.

Sincerely,



Joseph Snyder, M.D.
President

Statement from the Medical and Chirurgical Faculty of Maryland on the Clinton Health Security Act

The Medical and Chirurgical Faculty of Maryland (Med Chi) believes that the American health care system must be reformed to expand access, contain cost, and maintain quality. However, we believe that all reform measures must put the patient and the quality of care first while maintaining the security of the physician-patient relationship.

We applaud the President and Mrs. Clinton for their sincere efforts to establish a health care system that provides universal access and a comprehensive standard benefits package for all Americans. We support the plan's provisions that provide the necessary insurance reforms to guarantee that individuals can maintain their insurance despite changes in employment or health status. We are also encouraged that the plan recognizes the need for liability reform by including an alternative dispute resolution system, a collateral source rule, and caps on attorneys' fees.

President Clinton's proposed health system reform plan based on security, coverage, simplicity, savings, choice, quality, and responsibility is an ambitious blueprint for overhauling the American health care system. However, if the plan were to pass as currently proposed, patients and their physicians could face some serious problems.

One of our major concerns is that elements of this plan seem to create a barrier between physicians and patients. The strength of our current health care system relies upon allowing treatment choices to be based on the best interest of each individual patient. Global budgets, premium caps, and the plan's emphasis on cost savings could place undue restrictions on a physician's ability to make appropriate clinical decisions. We believe that the quality of health care will suffer if physicians are transformed from patient advocates to simple dispensers of services that are mandated by tightly controlled insurance plans and federal and state regulatory boards.

The Clinton plan proposes a seven-member, presidentially appointed National Health Board that would have broad regulatory control over state health alliances and plans and enforce global budgets for health care spending. These global budgets would be based solely on the Consumer Price Index rather than on changing demographics and health care needs across the population. Physicians believe that price indexes cannot adequately predict health care costs and that there is a desperate need to look at societal issues—drug abuse, crack babies, smoking, alcoholism—and their impact on the cost and delivery of health care. Otherwise, health system reform could create an arbitrary maldistribution of health services and prevent patients from receiving appropriate health care.

We are also concerned about the control the federal government will be exercising over the supply of physicians under the President's proposal. By mandating that medical schools train 50% of their students in primary care and by allocating residency slots through new national and regional graduate medical education councils, the federal government essentially will nationalize medical education in this country. We believe that the incentives to practice primary care included in the President's plan along with changes in the health care marketplace may be sufficient to encourage medical students to pursue careers in primary medicine. These incentives should be given an opportunity to work.

The President stated that his plan will provide more choices for physicians; however, we are concerned because the President did not define these choices. The President's employer mandates could actually limit physicians' choices by forcing them out of private practice and into managed care plans.

The President promised to "preserve what is right" with the existing system. The current system provides excellent health care to the majority of Americans; this quality care is "right" and must be preserved. However, the technology necessary to provide high quality care frequently carries a high price tag that escalates as technology advances. The President's plan does not address how it will control costs, yet still make this essential technology accessible to physicians and patients.

Finally, we are deeply concerned about how the President's proposal will be financed. The plan's reliance on deep spending cuts in Medicaid and Medicare could threaten future medical services for the poor and elderly. And, because the proposed plan increases bureaucracy at the federal, state, and corporate level, administrative costs of health care are likely to increase rather than decrease. Physicians and our patients want to know how this plan will be paid for.

Med Chi understands that the President's plan is subject to revision. We welcome the opportunity to work with state and federal legislators in shaping the future of health care and developing a plan that protects all patients' freedom to choose their own doctors and have a voice in their medical care.

How will the Clinton Health Plan affect the Maryland Health Care and Insurance Reform Act of 1993 (HB 1359)?

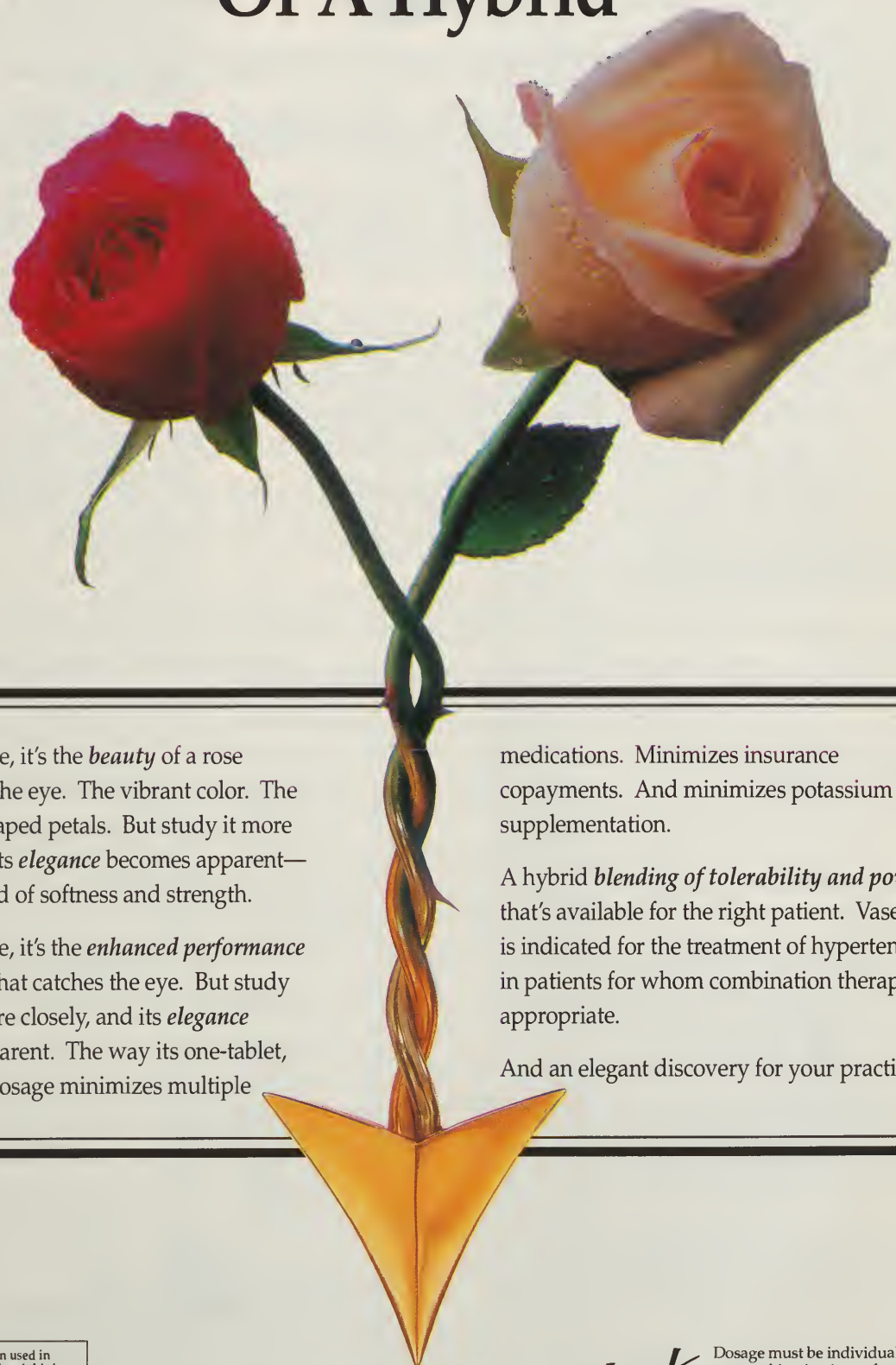
As passed in April of this year, the Maryland Health Care and Insurance Reform Act establishes the Maryland Health Care Access and Cost Commission (HCACC), which will oversee the development and implementation of HB 1359. The act includes legislation on (1) the Small Employer Health Benefit Program that requires all insurers to offer at least the Comprehensive Standard Health Benefit Plan to employers with 2 to 50 employees; (2) the establishment of a 15-member advisory committee to develop practice parameters as requested by HCACC; (3) a payment system applicable to health care providers; (4) a medical care database that will collect data on health services provided by health care practitioners; and (5) a procedure that regulates how physicians can charge for diagnostic tests.

The Clinton plan, as currently proposed, addresses health system reform on a much larger scale than the Maryland act by, among other things, extending a guaranteed benefits package to every American citizen and legal resident; requiring each state to create health care alliances; establishing a presidentally appointed National Health Board that would oversee the new health system, set a national health budget ceiling, and set spending targets for each state and health care alliances; capping attorneys' fees; providing for an alternative dispute resolution system; establishing a collateral source rule; and revamping medical education to provide more primary care physicians.

There are some areas of overlap between the Clinton plan and the Maryland act, including the requirement for all insurers to offer a standard benefits package; the requirement for statewide data collection; the creation of practice parameters; and the use of government-appointed boards to oversee cost-containment strategies. Both the Maryland act and the proposed Clinton plan prohibit insurers from denying insurance based on pre-existing conditions, establish insurance fees based on community rating, and make insurance coverage "portable."

Although there has been some indication from the Clinton administration that states could continue to operate their own plans, state officials, legislators and health care experts currently believe that Maryland will have to change its plan to comply with the federal plan if it is passed by Congress in its present form. For example, Maryland's standard benefits package would have to conform to the federal guaranteed benefits package. Practice parameters established by the state would have to comply with federally established practice parameters; however, community standards of care will **not** be superseded by federal standards of care. Finally, the payment system established by the Maryland act, which normally allows health care providers who receive less than a full fee from a health insurer to bill a patient for the balance, would be overridden by the regional or state-established fee structure system in the Clinton plan, which prohibits balance billing.

Discover The Elegance Of A Hybrid



At first glance, it's the ***beauty*** of a rose that catches the eye. The vibrant color. The delicately shaped petals. But study it more closely, and its ***elegance*** becomes apparent—a gentle blend of softness and strength.

At first glance, it's the ***enhanced performance*** of Vaseretic that catches the eye. But study Vaseretic more closely, and its ***elegance*** becomes apparent. The way its one-tablet, once-a-day dosage minimizes multiple medications. Minimizes insurance copayments. And minimizes potassium supplementation.

A hybrid ***blending of tolerability and power*** that's available for the right patient. Vaseretic is indicated for the treatment of hypertension in patients for whom combination therapy is appropriate.

And an elegant discovery for your practice.

USE IN PREGNANCY: When used in pregnancy during the second and third trimesters, ACE inhibitors can cause injury and even death to the developing fetus. When pregnancy is detected, Vaseretic® (Enalapril Maleate-Hydrochlorothiazide) should be discontinued as soon as possible. See WARNINGS, *Fetal/Neonatal Morbidity and Mortality.*

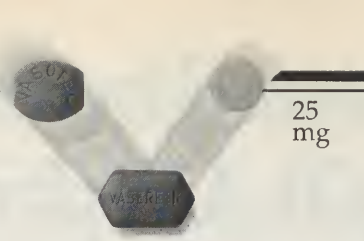
VASERETIC® 10-25 *Next*
Enalapril Maleate-Hydrochlorothiazide

Dosage must be individualized; the fixed combination is not for initial therapy.

Evaluation of the hypertensive patient should always include assessment of renal function.

For a Brief Summary of Prescribing Information, see adjacent pages.

TABLETS
VASERETIC®
(ENALAPRIL MALEATE-HYDROCHLOROTHIAZIDE)



USE IN PREGNANCY: When used in pregnancy during the second and third trimesters, ACE inhibitors can cause injury and even death to the developing fetus. When pregnancy is detected, VASERETIC (Enalapril Maleate-Hydrochlorothiazide) should be discontinued as soon as possible. See WARNINGS, *Fetal/Neonatal Morbidity and Mortality.*

CONTRAINDICATIONS: VASERETIC is contraindicated in patients who are hypersensitive to any component of this product and in patients with a history of angioedema related to previous treatment with an angiotensin converting enzyme inhibitor. Because of the hydrochlorothiazide component, this product is contraindicated in patients with anuria or hypersensitivity to other sulfonamide-derived drugs.

WARNINGS: *General; Enalapril Maleate; Hypotension:* Excessive hypotension was rarely seen in uncomplicated hypertensive patients but is a possible consequence of enalapril use in severely salt/volume depleted persons such as those treated vigorously with diuretics or patients on dialysis.

Syncope has been reported in 1.3 percent of patients receiving VASERETIC. In patients receiving enalapril alone, the incidence of syncope is 0.5 percent. The overall incidence of syncope may be reduced by proper titration of the individual components. (See PRECAUTIONS, *Drug Interactions,* and ADVERSE REACTIONS.)

In patients with severe congestive heart failure, with or without associated renal insufficiency, excessive hypotension has been observed and may be associated with oliguria and/or progressive azotemia, and rarely with acute renal failure and/or death. Because of the potential fall in blood pressure in these patients, therapy should be started under very close medical supervision. Such patients should be followed closely for the first two weeks of treatment and whenever the dose of enalapril and/or diuretic is increased. Similar considerations may apply to patients with ischemic heart or cerebrovascular disease, in whom an excessive fall in blood pressure could result in a myocardial infarction or cerebrovascular accident.

If hypotension occurs, the patient should be placed in the supine position and, if necessary, receive an intravenous infusion of normal saline. A transient hypotensive response is not a contraindication to further doses, which usually can be given without difficulty once the blood pressure has increased after volume expansion.

Angioedema: Angioedema of the face, extremities, lips, tongue, glottis and/or larynx has been reported in patients treated with angiotensin converting enzyme inhibitors, including enalapril. In such cases VASERETIC should be promptly discontinued and appropriate therapy and monitoring should be provided until complete and sustained resolution of signs and symptoms has occurred. In instances where swelling has been confined to the face and lips the condition has generally resolved without treatment, although antihistamines have been useful in relieving symptoms. Angioedema associated with laryngeal edema may be fatal. **Where there is involvement of the tongue, glottis or larynx, likely to cause airway obstruction, appropriate therapy, e.g., subcutaneous epinephrine solution 1:1000 (0.3 mL to 0.5 mL) and/or measures necessary to ensure a patent airway, should be promptly provided.** (See ADVERSE REACTIONS.)

Patients with a history of angioedema unrelated to ACE inhibitor therapy may be at increased risk of angioedema while receiving an ACE inhibitor (see also CONTRAINDICATIONS).

Neutropenia/Agranulocytosis: Another angiotensin converting enzyme inhibitor, captopril, has been shown to cause agranulocytosis and bone marrow depression, rarely in uncomplicated patients but more frequently in patients with renal impairment especially if they also have a collagen vascular disease. Available data from clinical trials of enalapril are insufficient to show that enalapril does not cause agranulocytosis at similar rates. Marketing experience has revealed several cases of neutropenia or agranulocytosis in which a causal relationship to enalapril cannot be excluded. Periodic monitoring of white blood cell counts in patients with collagen vascular disease and renal disease should be considered.

Hydrochlorothiazide: Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. Cumulative effects of the drug may develop in patients with impaired renal function.

Thiazides should be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

Lithium generally should not be given with thiazides (see PRECAUTIONS, *Drug Interactions, Enalapril Maleate and Hydrochlorothiazide).*

Pregnancy; Enalapril-Hydrochlorothiazide: There was no teratogenicity in rats given up to 90 mg/kg/day of enalapril (150 times the maximum human dose) in combination with 10 mg/kg/day of hydrochlorothiazide (2 ½ times the maximum human dose) or in mice given up to 30 mg/kg/day of enalapril (50 times the maximum human dose) in combination with 10 mg/kg/day of hydrochlorothiazide (2 ½ times the maximum human dose). At these doses, fetotoxicity expressed as a decrease in average fetal weight occurred in both species. No fetotoxicity occurred at lower doses; 30/10 mg/kg/day of enalapril-hydrochlorothiazide in rats and 10/10 mg/kg/day of enalapril-hydrochlorothiazide in mice.

When used in pregnancy during the second and third trimesters, ACE inhibitors can cause injury and even death to the developing fetus. When pregnancy is detected, VASERETIC should be discontinued as soon as possible. (See *Enalapril Maleate, Fetal/Neonatal Morbidity and Mortality,* below.)

Enalapril Maleate; Fetal/Neonatal Morbidity and Mortality: ACE inhibitors can cause fetal and neonatal morbidity and death when administered to pregnant women. Several dozen cases have been reported in the world literature. When pregnancy is detected, ACE inhibitors should be discontinued as soon as possible.

The use of ACE inhibitors during the second and third trimesters of pregnancy has been associated with fetal and neonatal injury, including hypotension, neonatal skull hypoplasia, anuria, reversible or irreversible renal failure, and death. Oligohydramnios has also been reported, presumably resulting from decreased fetal renal function; oligohydramnios in this setting has been associated with fetal limb contractures, craniofacial deformation, and hypoplastic lung development. Prematurity, intrauterine growth retardation, and patent ductus arteriosus have also been reported, although it is not clear whether these occurrences were due to the ACE-inhibitor exposure.

These adverse effects do not appear to have resulted from intrauterine ACE-inhibitor exposure that has been limited to the first trimester. Mothers whose embryos and fetuses are exposed to ACE inhibitors only during the first trimester should be so informed. Nonetheless, when patients become pregnant, physicians should make every effort to discontinue the use of VASERETIC as soon as possible.

Rarely (probably less often than once in every thousand pregnancies), no alternative to ACE inhibitors will be found. In these rare cases, the mothers should be apprised of the potential hazards to their fetuses, and serial ultrasound examinations should be performed to assess the intraamniotic environment.

If oligohydramnios is observed, VASERETIC should be discontinued unless it is considered lifesaving for the mother. Contraction stress testing (CST), a non-stress test (NST), or biophysical profiling (BPP) may be appropriate, depending upon the week of pregnancy. Patients and physicians should be aware, however, that oligohydramnios may not appear until after the fetus has sustained irreversible injury.

Infants with histories of *in utero* exposure to ACE inhibitors should be closely observed for hypotension, oliguria, and hyperkalemia. If oliguria occurs, attention should be directed toward support of blood pressure and renal perfusion. Exchange transfusion or dialysis may be required as means of reversing hypotension and/or substituting for disordered renal function. Enalapril, which crosses the placenta, has been removed from neonatal circulation by peritoneal dialysis with some clinical benefit, and theoretically may be removed by exchange transfusion, although there is no experience with the latter procedure.

No teratogenic effects of enalapril were seen in studies of pregnant rats, and rabbits. On a mg/kg basis, the doses used were up to 333 times (in rats), and 50 times (in rabbits) the maximum recommended human dose.

Hydrochlorothiazide; Teratogenic Effects: Reproduction studies in the rabbit, the mouse and the rat at doses up to 100 mg/kg/day (50 times the human dose) showed no evidence of external abnormalities of the fetus due to hydrochlorothiazide. Hydrochlorothiazide given in a two-litter study in rats at doses of 4 - 5. 6 mg/kg/day (approximately 1 - 2 times the usual daily human dose) did not impair fertility or produce birth abnormalities in the offspring. Thiazides cross the placental barrier and appear in cord blood.

Nonteratogenic Effects: These may include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

PRECAUTIONS: *General; Enalapril Maleate; Impaired Renal Function:* As a consequence of inhibiting the renin-angiotensin-aldosterone system, changes in renal function may be anticipated in susceptible individuals. In patients with severe congestive heart failure whose renal function may depend on the activity of the renin-angiotensin-aldosterone system, treatment with angiotensin converting enzyme inhibitors, including enalapril, may be associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death.

In clinical studies in hypertensive patients with unilateral or bilateral renal artery stenosis, increases in blood urea nitrogen and serum creatinine were observed in 20 percent of patients. These increases were almost always reversible upon discontinuation of enalapril and/or diuretic therapy. In such patients renal function should be monitored during the first few weeks of therapy.

Some patients with hypertension or heart failure with no apparent pre-existing renal vascular disease have developed increases in blood urea and serum creatinine, usually minor and transient, especially when enalapril has been given concomitantly with a diuretic. This is more likely to occur in patients with pre-existing renal impairment. Dosage reduction of enalapril and/or discontinuation of the diuretic may be required.

Evaluation of the hypertensive patient should always include assessment of renal function.

Hemodialysis Patients: Anaphylactoid reactions have been reported in patients dialyzed with high-flux membranes (e.g., AN 69*) and treated concomitantly with an ACE inhibitor. In these patients consideration should be given to using a different type of dialysis membrane or a different class of antihypertensive agent.

Hyperkalemia: Elevated serum potassium (greater than 5.7 mEq/L) was observed in approximately one percent of hypertensive patients in clinical trials treated with enalapril alone. In most cases these were isolated values which resolved despite continued therapy, although hyperkalemia was a cause of discontinuation of therapy in 0.28 percent of hypertensive patients. Hyperkalemia was less frequent (approximately 0.1 percent) in patients treated with enalapril plus hydrochlorothiazide. Risk factors for the development of hyperkalemia include renal insufficiency, diabetes mellitus, and the concomitant use of potassium-sparing diuretics, potassium supplements and/or potassium-containing salt substitutes, which should be used cautiously, if at all, with enalapril. (See *Drug Interactions.)*

Cough: Cough has been reported with the use of ACE inhibitors. Characteristically, the cough is nonproductive, persistent and resolves after discontinuation of therapy. ACE inhibitor-induced cough should be considered as part of the differential diagnosis of cough.

Surgery/Anesthesia: In patients undergoing major surgery or during anesthesia with agents that produce hypotension, enalapril may block angiotensin II formation secondary to compensatory renin release. If hypotension occurs and is considered to be due to this mechanism, it can be corrected by volume expansion.

Hydrochlorothiazide: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals. All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance: hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Warning signs or symptoms of fluid and electrolyte imbalance, irrespective of cause, include dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, confusion, seizures, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present, or after prolonged therapy. Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Hypokalemia may cause cardiac arrhythmia and may also sensitize or exaggerate the response of the heart to the toxic effects of digitalis (e.g., increased ventricular irritability). Because enalapril reduces the production of aldosterone, concomitant therapy with enalapril attenuates the diuretic-induced potassium loss (see *Drug Interactions, Agents Increasing Serum Potassium).*

Although any chloride deficit is generally mild and usually does not require specific treatment except under extraordinary circumstances (as in liver disease or renal disease), chloride replacement may be required in the treatment of metabolic alkalosis.

Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

In diabetic patients dosage adjustments of insulin or oral hypoglycemic agents may be required. Hyperglycemia may occur with thiazide diuretics. Thus latent diabetes mellitus may become manifest during thiazide therapy.

The antihypertensive effects of the drug may be enhanced in the postsympathectomy patient.

If progressive renal impairment becomes evident consider withholding or discontinuing diuretic therapy.

Thiazides have been shown to increase the urinary excretion of magnesium; this may result in hypomagnesemia.

Thiazides may decrease urinary calcium excretion. Thiazides may cause intermittent and slight elevation of serum calcium in the absence of known disorders of calcium metabolism. Marked hypercalcemia may be evidence of hidden hyperparathyroidism. Thiazides should be discontinued before carrying out tests for parathyroid function.

Increases in cholesterol and triglyceride levels may be associated with thiazide diuretic therapy.

Information for Patients; Angioedema: Angioedema, including laryngeal edema, may occur especially following the first dose of enalapril. Patients should be so advised and told to report immediately any signs or symptoms suggesting angioedema (swelling of face, extremities, eyes, lips, tongue, difficulty in swallowing or breathing) and to take no more drug until they have consulted with the prescribing physician.

Hypotension: Patients should be cautioned to report lightheadedness especially during the first few days of therapy. If actual syncope occurs, the patients should be told to discontinue the drug until they have consulted with the prescribing physician.

All patients should be cautioned that excessive perspiration and dehydration may lead to an excessive fall in blood pressure because of reduction in fluid volume. Other causes of volume depletion such as vomiting or diarrhea may also lead to a fall in blood pressure; patients should be advised to consult with the physician.

Hyperkalemia: Patients should be told not to use salt substitutes containing potassium without consulting their physician.

Neutropenia: Patients should be told to report promptly any indication of infection (e.g., sore throat, fever) which may be a sign of neutropenia.

Pregnancy: Female patients of childbearing age should be told about the consequences of second- and third-trimester exposure to ACE inhibitors, and they should also be told that these consequences do not appear to have resulted from intrauterine ACE-inhibitor exposure that has been limited to the first trimester. These patients should be asked to report pregnancies to their physicians as soon as possible.

NOTE: As with many other drugs, certain advice to patients being treated with VASERETIC is warranted. This information is intended to aid in the safe and effective use of this medication. It is not a disclosure of all possible adverse or intended effects.

Drug Interactions; Enalapril Maleate; Hypotension—Patients on Diuretic Therapy: Patients on diuretics and especially those in whom diuretic therapy was recently instituted, may occasionally experience an excessive reduction of blood pressure after initiation of therapy with enalapril. The possibility of hypotensive effects with enalapril can be minimized by either discontinuing the diuretic or increasing the salt intake prior to initiation of treatment with enalapril. If it is necessary to continue the diuretic, provide medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS.)

Agents Causing Renin Release: The antihypertensive effect of enalapril is augmented by antihypertensive agents that cause renin release (e.g., diuretics).

Other Cardiovascular Agents: Enalapril has been used concomitantly with beta adrenergic-blocking agents, methyldopa, nitrates, calcium-blocking agents, hydralazine and prazosin without evidence of clinically significant adverse interactions.

Agents Increasing Serum Potassium: Enalapril attenuates diuretic-induced potassium loss. Potassium-sparing diuretics (e.g., spironolactone, triamterene, or amiloride), potassium supplements, or potassium-containing salt substitutes may lead to significant increases in serum potassium. Therefore, if concomitant use of these agents is indicated because of demonstrated hypokalemia they should be used with caution and with frequent monitoring of serum potassium.

Lithium: Lithium toxicity has been reported in patients receiving lithium concomitantly with drugs which cause elimination of sodium, including ACE inhibitors. A few cases of lithium toxicity have been reported in patients receiving concomitant enalapril and lithium and were reversible upon discontinuation of both drugs. It is recommended that serum lithium levels be monitored frequently if enalapril is administered concomitantly with lithium.

Hydrochlorothiazide; When administered concurrently the following drugs may interact with thiazide diuretics:

Alcohol, barbiturates, or narcotics—potentiation of orthostatic hypotension may occur.

Antidiabetic drugs (oral agents and insulin)—dosage adjustment of the antidiabetic drug may be required.

Other antihypertensive drugs—additive effect or potentiation.

Cholestyramine and colestipol resins—Absorption of hydrochlorothiazide is impaired in the presence of anionic exchange resins. Single doses of either cholestyramine or colestipol resins bind the hydrochlorothiazide and reduce its absorption from the gastrointestinal tract by up to 85 and 43 percent, respectively.

Corticosteroids, ACTH—intensified electrolyte depletion, particularly hypokalemia.

Pressor amines (e.g., norepinephrine)—possible decreased response to pressor amines but not sufficient to preclude their use.

Skeletal muscle relaxants, nondepolarizing (e.g., tubocurarine)—possible increased responsiveness to the muscle relaxant.

Lithium—should not generally be given with diuretics. Diuretic agents reduce the renal clearance of lithium and add a high risk of lithium toxicity. Refer to the package insert for lithium preparations before use of such preparations with VASERETIC.

Non-steroidal Anti-inflammatory Drugs—In some patients, the administration of a non-steroidal anti-inflammatory agent can reduce the diuretic, natriuretic, and antihypertensive effects of loop, potassium-sparing and thiazide diuretics. Therefore, when VASERETIC and non-steroidal anti-inflammatory agents are used concomitantly, the patient should be observed closely to determine if the desired effect of the diuretic is obtained.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Enalapril in combination with hydrochlorothiazide was not mutagenic in the Ames microbial mutagen test with or without metabolic activation. Enalapril-hydrochlorothiazide did not produce DNA single strand breaks in an *in vitro* alkaline elution assay in rat hepatocytes or chromosomal aberrations in an *in vivo* mouse

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hone marrow assay.

Enalapril Maleate: There was no evidence of a tumorigenic effect when enalapril was administered for 106 weeks to rats at doses up to 90 mg/kg/day (150 times* the maximum daily human dose). Enalapril has also been administered for 94 weeks to male and female mice at doses up to 90 and 180 mg/kg/day, respectively, (150 and 300 times* the maximum daily dose for humans) and showed no evidence of carcinogenicity.

Neither enalapril maleate nor the active diacid was mutagenic in the Ames microbial mutagen test with or without metabolic activation. Enalapril was also negative in the following genotoxicity studies: rec-assay, reverse mutation assay with *E. coli*, sister chromatid exchange with cultured mammalian cells, and the micronucleus test with mice, as well as in an *in vivo* cytogenic study using mouse bone marrow.

There were no adverse effects on reproductive performance in male and female rats treated with 10 to 90 mg/kg/day of enalapril.

Hydrochlorothiazide: Two-year feeding studies in mice and rats conducted under the auspices of the National Toxicology Program (NTP) uncovered no evidence of a carcinogenic potential of hydrochlorothiazide in female mice (at doses of up to approximately 600 mg/kg/day) or in male and female rats (at doses of up to approximately 100 mg/kg/day). The NTP, however, found equivocal evidence for hepatocarcinogenicity in male mice.

Hydrochlorothiazide was not genotoxic *in vitro* in the Ames mutagenicity assay of *Salmonella typhimurium* strains TA 98, TA 100, TA 1535, TA 1537, and TA 1538 and in the Chinese Hamster Ovary (CHO) test for chromosomal aberrations, or *in vivo* in assays using mouse germinal cell chromosomes, Chinese hamster bone marrow chromosomes, and the *Drosophila* sex-linked recessive lethal trait gene. Positive test results were obtained only in the *in vitro* CHO Sister Chromatid Exchange (clastogenicity) and in the Mouse Lymphoma Cell (mutagenicity) assays, using concentrations of hydrochlorothiazide from 43 to 1300 µg/mL, and in the *Aspergillus nidulans* non-disjunction assay at an unspecified concentration.

Hydrochlorothiazide had no adverse effects on the fertility of mice and rats of either sex in studies wherein these species were exposed, via their diet, to doses of up to 100 and 4 mg/kg, respectively, prior to conception and throughout gestation.

Pregnancy, Pregnancy Categories C (first trimester) *and D* (second and third trimesters). See WARNINGS, *Pregnancy, Enalapril Maleate, Fetal/Neonatal Morbidity and Mortality.*

Nursing Mothers: Enalapril and enalaprilat are detected in human milk in trace amounts. Thiazides do appear in human milk. Because of the potential for serious reactions in nursing infants from either drug, a decision should he made whether to discontinue nursing or to discontinue VASERETIC, taking into account the importance of the drug to the mother.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS: VASERETIC has been evaluated for safety in more than 1500 patients, including over 300 patients treated for one year or more. In clinical trials with VASERETIC no adverse experiences peculiar to this combination drug have heen observed. Adverse experiences that have occurred, have been limited to those that have been previously reported with enalapril or hydrochlorothiazide.

The most frequent clinical adverse experiences in controlled trials were: dizziness (8.6 percent), headache (5.5 percent), fatigue (3.9 percent) and cough (3.5 percent). Adverse experiences occurring in greater than two percent of patients treated with VASERETIC in controlled clinical trials were: muscle cramps (2.7 percent), nausea (2.5 percent), asthenia (2.4 percent), orthostatic effects (2.3 percent), impotence (2.2 percent), and diarrhea (2.1 percent).

Clinical adverse experiences occurring in 0.5 to 2.0 percent of patients in controlled trials included: *Body As A Whole:* Syncope, chest pain, abdominal pain; *Cardiovascular:* Orthostatic hypotension, palpitation, tachycardia; *Digestive:* Vomiting, dyspepsia, constipation, flatulence, dry mouth; *Nervous/Psychiatric:* Insomnia, nervousness, paresthesia, somnolence, vertigo; *Skin:* Pruritus, rash; *Other:* Dyspnea, gout, back pain, arthralgia, diaphoresis, decreased libido, tinnitus, urinary tract infection.

Angioedema: Angioedema has been reported in patients receiving VASERETIC (0.6 percent). Angioedema associated with laryngeal edema may be fatal. If angioedema of the face, extremities, lips, tongue, glottis and/or larynx occurs, treatment with VASERETIC should be discontinued and appropriate therapy instituted immediately. (See WARNINGS.)

Hypotension: In clinical trials, adverse effects relating to hypotension occurred as follows: hypotension (0.9 percent), orthostatic hypotension (1.5 percent), other orthostatic effects (2.3 percent). In addition syncope occurred in 1.3 percent of patients. (See WARNINGS.)

Cough: See PRECAUTIONS, *Cough.*

Clinical Laboratory Test Findings, Serum Electrolytes: See PRECAUTIONS.

Creatinine, Blood Urea Nitrogen: In controlled clinical trials minor increases in hlood urea nitrogen and serum creatinine, reversihle upon discontinuation of therapy, were observed in about 0.6 percent of patients with essential hypertension treated with VASERETIC. More marked increases have been reported in other enalapril experience. Increases are more likely to occur in patients with renal artery stenosis. (See PRECAUTIONS.)

Serum Uric Acid, Glucose, Magnesium, and Calcium: See PRECAUTIONS.

Hemoglobin and Hematocrit: Small decreases in hemoglobin and hematocrit (mean decreases of approximately 0.3 g percent and 1.0 vol percent, respectively) occur frequently in hypertensive patients treated with VASERETIC hut are rarely of clinical importance unless another cause of anemia coexists. In clinical trials, less than 0.1 percent of patients discontinued therapy due to anemia.

Liver Function Tests: Rarely, elevations of liver enzymes and/or serum bilirubin have occurred.

Other adverse reactions that have been reported with the individual components are listed below and, within each category, are in order of decreasing severity.

Enalapril Maleate—Enalapril has heen evaluated for safety in more than 10,000 patients. In clinical trials adverse reactions which occurred with enalapril were also seen with VASERETIC. However, since enalapril has been marketed, the following adverse reactions have been reported: *Body As A Whole:* Anaphylactoid reactions (see PRECAUTIONS, *Hemodialysis Patients*); *Cardiovascular:* Cardiac arrest; myocardial infarction or cerehrovascular accident, possibly secondary to excessive hypotension in high risk patients (see WARNINGS, *Hypotension*); pulmonary embolism and infarction; pulmonary edema; rhythm disturbances including atrial tachycardia and bradycardia; atrial fihrillation; hypotension; angina pectoris; *Digestive:* Ileus, pancreatitis, hepatic failure, hepatitis (hepatocellular [proven on rechallenge] or cholestatic jaundice), melena, anorexia, glossitis, stomatitis, dry mouth; *Hematologic:* Rare cases of neutropenia, thrombocytopenia and bone marrow depression. Hemolytic anemia, including cases of hemolysis in patients with G-6-PD deficiency, has been reported; a causal relationship to enalapril has not been established. *Nervous System/Psychiatric:* Depression, confusion, ataxia, peripheral neuropathy (e.g., paresthesia, dysesthesia); *Urogenital:* Renal failure, oliguria, renal dysfunction (see PRECAUTIONS), flank pain, gynecomastia; *Respiratory:* Pulmonary infiltrates, bronchospasm, pneumonia, bronchitis, rhinorrhea, sore throat and hoarseness, asthma, upper respiratory infection; *Skin:* Exfoliative dermatitis, toxic epidermal necrolysis, Stevens-Johnson syndrome, herpes zoster, erythema multiforme, urticaria, pemphigus, alopecia, flushing, photosensitivity; *Special Senses:* Blurred vision, taste alteration, anosmia, conjunctivitis, dry eyes, tearing.

Miscellaneous: A symptom complex has been reported which may include a positive ANA, an elevated erythrocyte sedimentation rate, arthralgia/arthritis, myalgia/myositis, fever, serositis, vasculitis, leukocytosis, eosinophilia, photosensitivity, rash and other dermatologic manifestations.

Fetal/Neonatal Morbidity and Mortality: See WARNINGS, *Pregnancy, Enalapril Maleate, Fetal/Neonatal Morbidity and Mortality.*

Hydrochlorothiazide—Body as a Whole: Weakness; *Digestive:* Pancreatitis, jaundice (intrahepatic cholestatic jaundice), sialadenitis, cramping, gastric irritation, anorexia; *Hematologic:* Aplastic anemia, agranulocytosis, leukopenia, hemolytic anemia, thrombocytopenia; *Hypersensitivity:* Purpura, photosensitivity, urticaria, necrotizing angiitis (vasculitis and cutaneous vasculitis), fever, respiratory distress including pneumonitis and pulmonary edema, anaphylactic reactions; *Musculoskeletal:* Muscle spasm; *Nervous System/Psychiatric:* Restlessness; *Renal:* Renal failure, renal dysfunction, interstitial nephritis (see WARNINGS); *Skin:* Erythema multiforme including Stevens-Johnson syndrome, exfoliative dermatitis including toxic epidermal necrolysis, alopecia; *Special Senses:* Transient blurred vision, xanthopsia.

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* Based on patient weight of 50 kg.

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Editorial

Jurassic Park revisited

This month's *Maryland Medical Journal* contains a testimony for old-fashioned practitioners of medicine (see *Speak Out*, page 974). Doc Pickett and his genre eschew new medical technology and make diagnoses and determine treatment regimens without the benefits of magnetic resonance imaging (MRI), computerized axial tomography (CAT), and designer medications. It has become quite fashionable to bash high-tech diagnostic and therapeutic medical modalities. There are already administrative and financial constraints that limit both physician and patient access to many diagnostic studies and treatments. Much present day mundane medical technology, however, was considered radical during its development and early use, and some defense of new medicine is in order.

My father-in-law died in 1971 at the age of 54 from his third myocardial infarction. Early administration of tissue plasminogen activator or streptokinase during the early hours of his first heart attack or prompt interventional cardiology with angioplasty or coronary bypass would likely have prolonged and improved the quality of his life. Although the expense would have been high, his wife and four children would certainly have been appreciative.

The wife of a minister I know recently had a devastating cerebral hemorrhage from an intracranial arteriovenous malformation. Gamma knives and other microneurosurgical techniques used to ablate such vascular abnormalities without producing extensive neurological deficits are expensive. The patients who benefit from these techniques are grateful, however, that their cerebrovascular accidents are not just considered strokes about which little can be done.

Last year in the United States, more gallbladders were removed laparoscopically than by the conventional avenue of laparotomy. For those patients who had minimal postoperative discomfort and returned to work

Editorial

three to four days postsurgery rather than suffering through abdominal discomfort for a four- to six-week convalescent period after the old conventional procedure, laparoscopic surgery is a wonderful new medical development. Yet just five years ago, laparoscopic cholecystectomy was considered heretical by even enlightened chairpersons of surgery departments at major medical universities. The renal transplant patient whose kidney rejection is prevented by cyclosporin, the ovarian cancer patient whose advanced tumor responds dramatically to Taxol (paclitaxel), the lumbar disc patient whose pain is mercifully relieved by microsurgery after precise diagnosis and definition of the disc herniation by MRI—all of these people are helped tremendously by the new expensive technology and research that many "Doc Picketts" would denounce as ridiculous, newfangled, or useless.

Physicians today probably do rely too much on high technology such as CAT scans or MRI or overutilize expensive technology such as renal dialysis and coronary bypass surgery. The importance of listening carefully to patients' complaints and making sensible, thoughtful assessments of risk/benefit ratios for diagnostic tests and medical therapies cannot be overemphasized. It does not serve medicine well, however, to constantly impugn the development and utilization of high-tech instrumentation and therapeutic modalities in the proper setting. Perhaps we do need some more "dinosaurs" in medicine, but we also need pioneers and rocket scientists.

ROBERT G. KNODELL, M.D.
Owings Mills, Maryland ■

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Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalmic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon® is indicated as a sympathicolytic and mydriatic. It may have activity as an aphrodisiac.

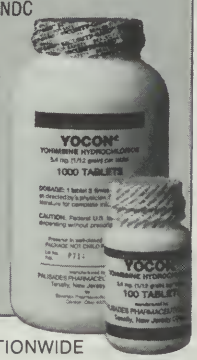
Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.[1,2] Also dizziness, headache, skin flushing reported when used orally.[1,3]

Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.[1,3,4] 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to ½ tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.[3]

How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.



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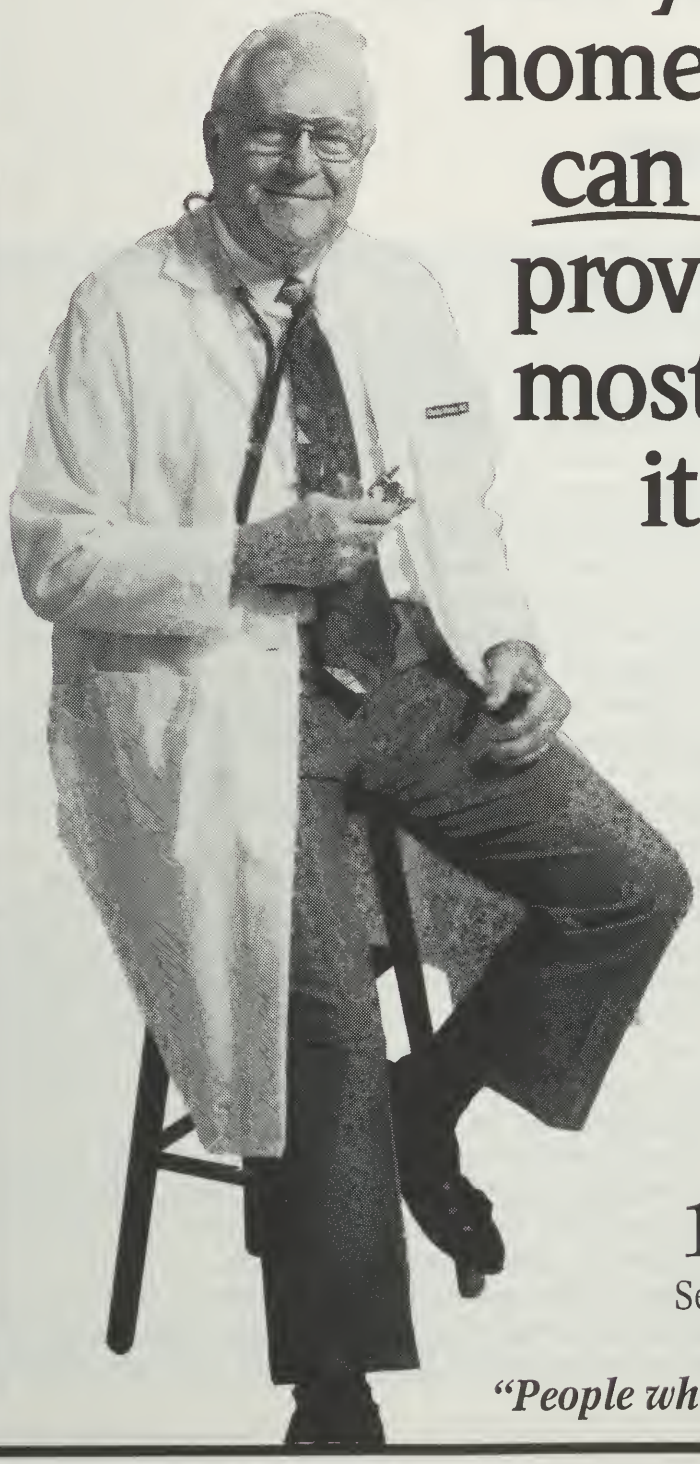
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Speak Out

Dinosaurs

My in-laws live in New England—a pair of church-going 90-year olds, still independent in their apartment. Their health is good, but they've had their share of illness along the way.

My wife and I have lived in Maryland for 30 years. It's the same time zone but different area code—too far to intervene emergently and sometimes too close to avoid intense feelings of responsibility. "Maybe we should drive up there this weekend...they sounded so vulnerable today on the phone. They need someone to be there."

Things changed a year ago. Their doctor died. Doc Pickett left this life and left behind a few of his loyal customers. Actually, he was a few years younger than my in-laws. He ended up at home on oxygen, pushing himself to get out a whole paragraph of conversation before pausing to get his wind.

Everyone called him "Doc." He practiced 55 years in one town and took his residency in life experiences. He had been the town public health officer, the football team doctor, a friend and confidant to many, an outspoken (and sometimes annoying) critic of newfangled trends, but always a staunch foe of foolishness.

My wife and I would bite our tongues and roll our eyes when my mother-in-law would tell us of her medical encounters with Doc Pickett. "The Pick," as we called him, apparently relied on outdated medications, and his nondecisions were scary to us at times—at least when we heard my mother-in-law's version of the signs and symptoms. My wife, the nurse, needed restraint at times to keep from calling the Pick and telling him that he should be trying some current pharmaceutical, or he should be sending her parents to the hospital for further evaluation.

Amazingly, the illness or condition always faded or resolved, and my in-laws' unswerving reliance on Doc Pickett never wavered. We could have advised, or driven to their door, or called 911 on many occasions, but they would never have budged without consulting Doc.

A few times in the past five years, they have been too sick to be on their own but not sick enough to be hospitalized. My wife and I drive up, load them into the back seat, and let them recuperate in the balmy climate of

central Maryland. While with us, they consult an internist in Towson and have developed the same sort of trust in his care. They both had pneumonia in 1989, and their belief in his attentive care was just as crucial to their recovery as was his antibiotic. When they recover, they always press for a return trip, refuse to remain in Maryland, disclaim our pointed comments about retirement communities, and off we go back to New England.

Six months before he died, the Pick told his patients to find another physician. We wrote, with my in-laws' permission, and asked that records be forwarded to their "Maryland doctor." The records were a mess, copies of illegible notes and jumbled lab tests—some belonging to other people—no chronologic typewritten histories. We sighed with collective relief that the old folks could now get more appropriate care. They were scheduled to see a young, well-trained internist in New England and could always see someone here in Maryland who medically "spoke our language."

So Doc Pickett died and was publicly appreciated in his hometown as one of a disappearing species. There were some very nice tributes, and we read all the accounts in the newspapers forwarded to us from up north.

Finally, my in-laws were free of the antiquated practices, the old-fashioned thinking, and the low-tech limitations. There were a few months of symptom-free peace and low daughter-anxiety. The in-laws chose a young internist and met briefly with him to review their health concerns. It went well. The breathing in Maryland was easier.

No one was surprised when my mother-in-law (Mary) had a flare-up of her osteoarthritis with neck and back pain. A young chiropractor had advertised her services in the church bulletin, and my mother-in-law went for an initial evaluation—including x-rays and manipulation—all at a "discount." The patient was ambivalent—her neck was a little sore after the visit, but the firm recommendation urged regular visits. The calls to Maryland increased, and the role-reversed advice was to avoid the subluxation business. The chiropractor began to call the home and offer dirt-cheap follow-up treatments, promising relief.

Speak Out

We began to miss Doc Pickett. Why couldn't he have lasted a few more years. My mother-in-law resisted the chiropractic marketing and recovered from the acute pain.

Next came the dizzy spells. Mary had experienced them for years, and they had responded only to time and reassurance from the Pick—plus small doses of meclizine. Now we had entered the modern era. The phone calls usually came after the event by a few days—so the Holter monitor had already been utilized when the symptoms were reported. The new doctor searched but couldn't find the etiology. Mary recovered slowly with time, a little meclizine, and some support but less reassurance than with Doc Pickett. The tests, needless to add, were "covered" by Medicare. I never saw the statements, but the paperwork mounted while the dizziness resolved.

Next it was my father-in-law's turn. Joe's movements had become more restricted, turns were slower, gait more shuffling, and muscles stiffer. During a visit here, his Maryland internist suggested seeing a neurologist, maybe trying some anti-Parkinson's medications. Back to New England and to a neurologist via the new internist. The diagnosis: Parkinson's disease—then a string of medication trials, much of which resulted in severe nausea and slight improvement in mobility.

My wife and I tried to think like Doc Pickett. We countered reports of new medical adventures with words of caution. "Try a smaller dose...call the neurologist...make sure the secretary has him return your call." It was difficult to be so far away. If only the Pick were not extinct. He wouldn't have tried anything fancy. He would weigh the comfort and outcome prospects against the cost of tests and hopes for a cure. Mary and Joe had always trusted his recommendations...without many questions. They trusted his judgment, and it wasn't just because he was a contemporary. He had always done the same for his patients, whether they were twice his age or half his age.

Now we wished for a clone. Why couldn't Doc Pickett have trained one of his children or taken an apprentice. Now that Mary and Joe would have more medical needs, where was the Pick? How had he and his kind disappeared so suddenly? His former patients tended to trust all doctors

Speak Out

because of him, but now they have multiple doctors whose communications are not always so direct, and whose advice is more complex and sometimes at odds with one another's.

Dr. Pickett graduated from medical school in the early 1930s. He must have marveled at hospital ad campaigns and HMO competition and at quarterly statements of medical corporations. Even though he didn't always use the latest available technology, he seemed to understand that a doctor and patient are members of the same community and usually live together over an extended period of time.

If my wife and I survive a few more decades, we'll have to rely on someone's judgment about our health. The living will and durable power of attorney are some solace, but where will we find our Dr. Pickett?

JOHN W. BUCKLEY, M.D.
Towson, Maryland ■

Speak Out is a new *Maryland Medical Journal* department created to enable Med Chi members to voice their opinions, convictions, or feelings about medicine and related subjects in a more lengthy format than is normally afforded by a letter to the editor. Please send *Speak Out* submissions, as well as letters to the editor and manuscripts, to Editor, *MMJ*, 1211 Cathedral Street, Baltimore, MD 21201-5585.

LETTERS TO THE EDITOR

Does article send the wrong message?

I read the article in the April 1993 journal regarding a Maryland physician trip into the state of Croatia. I am concerned that the article gives the message of supporting the Croatians politically vs the others, especially the Bosnians.

This message is a subliminal message in the form of directing medical attention and care to Croatia and not really the others, especially the nearby Republic of Bosnia, which is suffering much more than Croatia. Also, it states some subjective opinions that Croatia is an advanced country with excellent communications and equipment, etc.

It is my feeling that if anyone deserves help in that area of the world, it should be all who are suffering in the region, regardless whether they belong to Bosnia or Croatia. Knowing what is happening there, obviously the Bosnia Muslims are the ones suffering the most with rape, starvation, and mortar fire.

I felt your article gives the wrong message. I hope you will correct this in future articles or at least put a disclaimer, that this by no means indicates an endorsement of one country against the other. The *Maryland Medical Journal* should be above political bias or religious prejudice.

BASHAR PHAROAN, M.D., F.A.C.S.
Dr. Pharoan is a general surgeon in Baltimore, Maryland. ■

Needle aspiration cytologic biopsies of breast masses—economical and accurate

I feel compelled to comment on the excellent article by Cynthia Swann, M.D., titled "Breast carcinoma with halo sign" published in the May issue of the journal. Dr. Swann makes a good case to support her final sentence stating "Caution must be used in the evaluation of all solid breast masses, and malignant etiologies must be considered even in the presence of the halo sign."

A criticism is herewith directed, not at Dr. Swann or her article, but at the fact that "Attempted aspiration by the patient's physician did not yield fluid." I presume the mass was palpable, and the physician properly wanted to determine whether it might have been a simple cyst. The very presence of a needle in this mass confirming it was solid rather than cystic provided the perfect opportunity to obtain a fine needle suction aspiration cytologic biopsy. In my view, every palpable suspicious breast mass should undergo needle puncture, not just for fluid aspiration, but, if no fluid is present, an immediate fine needle aspiration biopsy. This is certainly the simplest biopsy technique that I am aware of, and also one of the most accurate. As noted in my article published in the April *MMJ*, needle aspiration cytologic biopsies of breast masses give the most accurate definitive diagnosis possible without open surgical removal. It should be a technique utilized by every physician managing breast disease.

ROBERT E. MARTIN, M.D.
Dr. Martin is a general surgeon in Baltimore, Maryland. ■

Cost-effectiveness questioned

Dr. Martin's letter raises the question: Has a cost-effectiveness assessment of fine needle aspiration biopsy of palpable solid breast masses been conducted? Dr. Martin suggests that for a palpable breast mass, in addition to attempts to aspirate fluid, a fine needle biopsy be obtained at the same time. He believes that this procedure is "the most prompt, the most economical, and the most accurate." Certainly, it is a prompt procedure since it can be done at the time of the aspiration. Whether it is economical depends on the sensitivity and specificity of the test.

The sensitivity and specificity of a test is influenced by the prevalence of the disease in the population under study. If the prevalence of the disease is low, the sensitivity will be low, and the procedure may cause further unnecessary testing, thereby increasing total health care costs.

No study has yet evaluated the sensitivity of fine needle aspiration biopsy for palpable breast masses. Solid masses will almost always be excised, however, regardless of the results of the fine needle aspiration biopsy. The literature referenced in Dr. Martin's recent article in *MMJ*[1] does support fine needle aspiration biopsy for occult breast lesions.[2-4]

Whether the procedure is the most accurate is interesting, in that other than removal of the mass, there is no diagnostic procedure that can be done to determine whether the mass is benign or malignant. In the cited articles, 9%-10% of fine needle aspiration biopsies were falsely negative.[3,5]

For a palpable breast mass, if fluid is not aspirated, surgical removal would be the definitive procedure, and fine needle aspiration biopsy would only add to the cost of health care without changing the care of the patient. Fine needle aspiration cytology represents another technological procedure that has not been subjected to a cost-effectiveness study, but which, as documented in the literature, is used extensively.[6-7]

HERBERT L. MUNCIE, JR., M.D.
Dr. Muncie is chairperson, Department of Family Medicine, University of Maryland, and a member of the *MMJ* Editorial Board.

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Our Pictures Are Worth A Thousand Words.

Case #24

Baseline mammogram in a 56 year old asymptomatic woman.

DIAGNOSIS: Invasive Ductal Carcinoma.

Over 180,000 women in the United States will develop breast cancer in 1993. Mammography is still the best way to detect small breast cancers that result in decreased mortality and can be treated with breast conservation therapy. However, mammography may be non-specific and with the increased utilization of screening, numerous non-palpable, indeterminate lesions are detected. Until recently, the only way to determine whether these lesions were benign or malignant was with needle-guided open surgical biopsy.

Stereotactic breast biopsies are now performed in an outpatient setting in our Pomona office. This device uses a computer to calculate the exact 3D position of a non-palpable lesion and directs a needle into the abnormality for tissue sampling.

Figure 1 (craniocaudal view) shows a 1 cm. spiculated mass in the right inner breast (arrow). Local anesthesia is administered directly over the area to be biopsied. A small skin puncture is made and a 14-gauge needle attached to an automated biopsy gun is placed directly into the abnormality under computer guidance. Figure 2 demonstrates the pre-biopsy position of the needle with respect to the lesion. The post-biopsy film (Figure 3) shows the needle through the mass confirming the lesion was sampled.

Stereotactic biopsy has achieved the same sensitivity (95%) as open surgical biopsy. The advantages of stereotactic breast biopsy include improved cosmesis and decreased morbidity. The patient is able to resume routine activities the same day. In addition, the cost of stereotactic biopsy is less than half that of open surgical biopsy. With the emphasis on medical cost containment, this procedure could dramatically reduce open biopsies of benign breast lesions and two-stage surgical procedures for treatment of breast cancer.



FIGURE 1

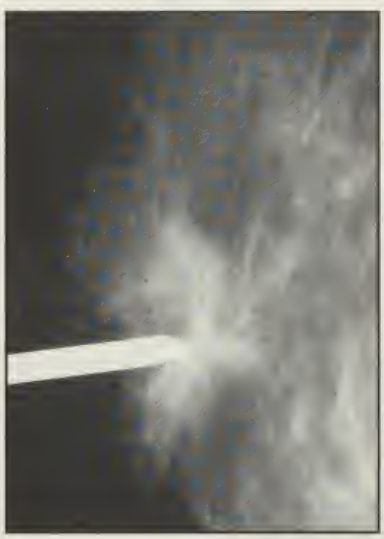


FIGURE 2



FIGURE 3

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Tuberculosis: Optimism, pessimism, frustration

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ABSTRACT: *The re-emergence of tuberculosis as a serious public health threat has captured the nation's attention. Tuberculosis more frequently affects the ethnic minorities and the socially and economically disadvantaged residents of Maryland. Effective regimens are available to treat and prevent tuberculosis. Consistent application of proven infection control measures and of treatment and prevention regimens will prevent the development and spread of multidrug-resistant tuberculosis.*

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The availability of isoniazid (INH), para-aminosalicylic acid (PAS), and streptomycin, soon followed by a series of other effective chemotherapeutic agents in the early and mid 1950s, heralded a new era in tuberculosis management. Until that time, the outcome of care for patients with tuberculosis was measured in terms of attenuating or stopping the progression of disease, as distinct from cure. Health care professionals were aware of the relationship between tuberculosis and social indicators within the community, such as poverty, overcrowding, chronic diseases, and alcoholism. To manage patients who had the most advanced disease and presented the greatest public health challenge, sanitoria were introduced. In those facilities, patients were isolated for periods of 18 to 24 months, and therapy consisted of bed rest, controlled diet, and exposure to fresh air and sunlight, as well as surgical procedures. Following discharge from a sanitarium, patients were usually followed for life in ambulatory care settings.

Before the advent of chemotherapy, clinicians and public health officials noted a decline in tuberculosis incidence, which has been attributed to improvement in living conditions.[1–4] Despite the availability of suitable medications to prevent and treat the disease, many health care leaders and policy-making officials still thought that bed rest and isolation, in addition to long-term follow-up, were warranted. This belief persisted even after a study in Madras, India, showed that ambulatory patients, living in the

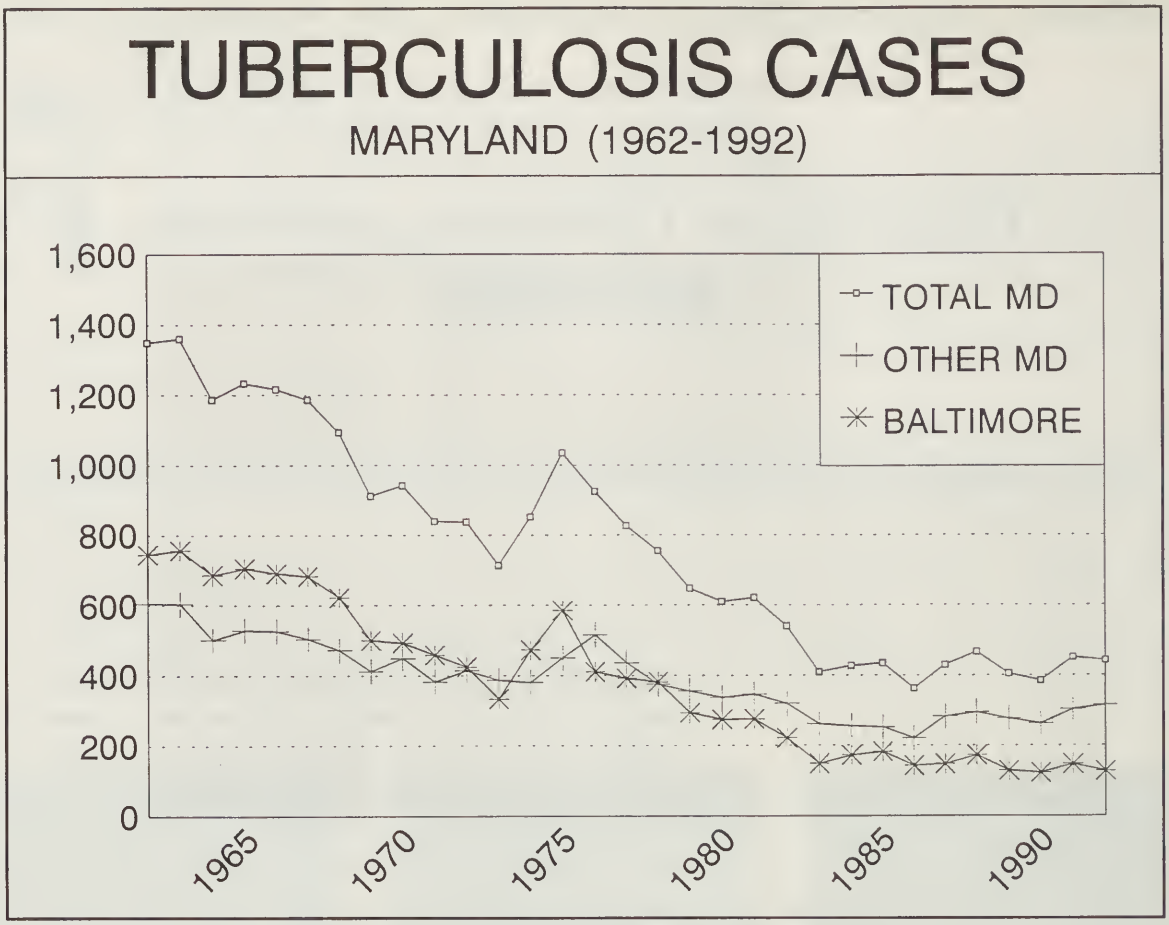


Figure 1. Number of tuberculosis cases in Maryland (1962–1991).

community and taking prescribed medication, had outcomes as good or better than hospitalized patients receiving the same chemotherapeutic regimen.[5]

With the advent of rifampin, ethambutol, and pyrazinamide, and the demonstrated effectiveness of short-course chemotherapy in ambulatory care settings, patients could be cured. They did not need hospitalization, except, in some instances, for diagnosis, initiation of chemotherapy, or management of other clinical conditions. The major factors in successful tuberculosis treatment were compliance with drug regimens and sensitivity of the organisms to these agents.[5–7]

By the late 1970s, most state and privately run sanatoria had closed. At that time, newly reported cases tended to be among older individuals born in the United States and infected by the tubercle bacillus earlier in their lifetimes. Emphasis was placed on management of all tuberculosis patients within the mainstream of medicine, with epidemiological follow-up by local health departments.[8] Paralleling these dramatic developments, strategies were defined to eradicate tuberculosis by the end of the twentieth century.[9] The future looked particularly bright for the elimination of tuberculosis by 2010.

However, all was not quite right. Unless patients were appropriately supervised, they had the potential to develop hepatitis while taking preventive INH.[10, 11] Many physicians, even those specializing in internal medicine, lacked knowledge regarding the management of tuberculosis patients.[12] Additionally, demographic changes influenced tuberculosis incidence, such as the immigration of persons with infection or frank disease, many from countries with a high prevalence of drug-resistant organisms.[13,14] Over the past decade, the advent of human immunodeficiency virus (HIV) has created a large reservoir of exquisitely susceptible individuals, further complicating management of this disease.[15]

Tuberculosis control in Maryland

The number of tuberculosis cases reported each year in Maryland decreased significantly over the past three decades (**Figure 1**). The decrease in case rates has been particularly dramatic in Baltimore City. In 1962, Baltimore accounted for more than 56% of the tuberculosis cases reported in Maryland; in 1991, the city had fewer than 32% of the cases.

The burden of tuberculosis falls most heavily on the nonwhite population, predominantly African Americans in Baltimore and foreign-born minorities elsewhere in the state. In the past, the most affected age group was the elderly. With the advent of the HIV epidemic, there has been a shift to younger

age groups and an increasing prevalence of extrapulmonary involvement. Of increasing concern is a rise in the number of drug-resistant cases over the past two or three years. Preliminary 1991 and 1992 data indicate a reversal of the downward trend in tuberculosis rates: in 1991, the incidence was 17% higher than in 1990; in 1992, rates stabilized (Division of Tuberculosis Control, Maryland Department of Health and Mental Hygiene).

Table 1. Conditions associated with increased tuberculosis risk

- ▲ Intravenous drug use
- ▲ Hematologic or reticuloendothelial neoplasm
- ▲ Immunosuppressive therapy, including long-term (i.e., > three months) high-dose corticosteroid therapy (equivalent to 15 mg/day of prednisone)
- ▲ Silicosis
- ▲ Renal dialysis
- ▲ Insulin-dependent or poorly controlled diabetes mellitus
- ▲ Nutritional deficiency with substantial loss of body weight (10% to 15% below ideal body weight)

Measures taken to control tuberculosis in Maryland communities mirror national trends. Tuberculosis is usually managed on an outpatient basis with regular patient monitoring. Except for patients with drug-resistant disease, inpatient stays, when admission occurs at all, are typically of short duration and in general medical facilities.[16,17]

Each of Maryland's 23 counties and the city of Baltimore has a tuberculosis control program. These programs are responsible for monitoring the infectiousness (potential for transmission) of all individuals reported as having suspected or confirmed tuberculosis and residing in the jurisdiction. Each program can receive referrals and provide tuberculosis-related care for suspected and confirmed cases. The local health department also investigates contacts to identify persons who have undetected tuberculosis as well as persons who are infected with the tubercle bacillus and may benefit from preventive therapy. Preventive therapy is provided in selected cases. Physicians caring for tuberculosis patients should expect regular follow-up by the local tuberculosis control program.[16]

Diagnosis

In the diagnosis of tuberculosis, tuberculin skin testing is an important adjunct to a thorough history and physical examination. A negative skin test does not rule out tuberculosis. The Mantoux test may be falsely negative due to a variety of factors, including overwhelming infection with *Mycobacterium tuberculosis*.[18] HIV-infected persons with tuberculosis are frequently anergic.[19] A delayed hypersensitivity immune response is indicative of latent infection with a mycobacterial species. Multiple puncture tests have limited usefulness in screening populations with a very low prevalence of tuberculosis infection.

The gold standard for tuberculosis skin testing is the Mantoux method. This method involves the intradermal injection of 0.1 ml of purified protein derivative (PPD) tuberculin 5 TU (intermediate strength). The injection site should be the volar aspect of the forearm.[18] The dose or concentration of PPD does not vary with size or clinical condition of the patient. There is no age restriction on tuberculin skin testing. Some authors have recommended two-step skin testing in the elderly to boost an immune response that has waned with age.[20-22]

In Maryland, our experience over the past decade has not demonstrated a significant rate of the booster phenomenon, and the tuberculosis rate among nursing home patients is extremely low. Therefore, two-step skin testing of nursing home residents, as a routine procedure, is not judged to be necessary.[23,24] (Unpublished data compiled by Mr. S. Morita for the Maryland Department of Health and Mental Hygiene, 1981.)

Tuberculin skin tests should be read after 48 to 72 hours. The amount of induration should be measured perpendicular to the long axis of the arm.[18] The presence of erythema without induration has no significance. For persons at markedly increased risk of tuberculosis, including those with clinical or radiographic evidence of disease, a history of recent close contact with a person with tuberculosis, or immunosuppression or HIV infection, induration measuring 5 mm or more in diameter is considered a positive response.[25,26] In Maryland, we have also recommended a 5 mm cut point for skin testing performed on infants younger than one year of age. This is considered warranted because of the very low probability that an infant would have been exposed to a mycobacterial agent other than tuberculosis and the very high risk of serious complications should tuberculosis develop in someone this young.[16]

For persons at moderately increased tuberculosis risk, the skin test reaction is considered positive when induration measures 10 mm. Increased tuberculosis risk has been associated with the conditions listed in **Table 1.** For persons who have no tuberculosis risk factors, induration measuring >15 mm would be considered a positive response.[25] A history of vaccination with bacille Calmette-Guérin (BCG) should not influence tuberculin skin test interpretation. A positive skin test should still be interpreted as evidence of probable tubercle bacillus infection.[26]

A chest radiograph is essential in suspected pulmonary disease. Periodic chest films during therapy are no longer

routinely recommended, although an occasional film during therapy may be useful in monitoring response in culture-negative cases. Clinical specimens (e.g., sputum, pleural fluid, cerebrospinal fluid [CSF], blood) should be submitted for microscopic examination with staining for acid-fast organisms and for mycobacteriologic cultures. Any newly positive culture processed by the Department of Health and Mental Hygiene (DHMH) Mycobacteriology Laboratory will be tested for antimycobacterial drug resistance. Drug sensitivities should be specifically requested when submitting specimens to other laboratories or submitting follow-up specimens from persons who have had unsatisfactory clinical responses.

For pulmonary cases, we recommend obtaining three sputum specimens taken at least 24 hours apart before beginning therapy. If any of these cultures grows *M. tuberculosis,* sputum cultures should be obtained at least monthly until the cultures are no longer positive. When the currently recommended treatment regimens are employed, positive sputum cultures should convert to negative within two to three months. If cultures are still positive after three months, the patient should be evaluated carefully for noncompliance, and drug resistance should be ruled out by again obtaining drug sensitivity tests.[16] While awaiting the results of drug sensitivity tests, patients should be placed on two additional antimycobacterial drugs to which the organism was sensitive on initial testing.

Recent innovations in mycobacteriology are permitting more rapid growth and identification of mycobacterial species. These innovations include the radiometric system for culturing (BACTEC), DNA (deoxyribonucleic acid) probes, the use of monoclonal antibodies, and gas chromatography.[27-37] Research to develop a serologic test that would permit disease activity estimation by following rises and falls in the antibody titer is increasing.[38-40]

Treatment

The Advisory Council for the Elimination of Tuberculosis of the Centers for Disease Control and Prevention (CDC) and the DHMH Division of Tuberculosis Control currently recommend a treatment regimen that includes INH, rifampin (RIF), pyrazinamide (PZA), and ethambutol (EMB) or streptomycin for the initial induction phase, lasting eight weeks. During the initial two weeks, all drugs are given daily. For the next six weeks, drugs are given twice weekly. The induction phase is followed by at least four months of continuous treatment with INH and RIF given twice weekly. When this regimen is used, all doses must be directly observed.[41,42] This regimen is used for both pulmonary and extrapulmonary disease and in all age groups. With this regimen, most patients become culture negative within two months.

Pregnant women with active disease should be treated with INH, RIF, and EMB during the induction phase; the period of continuation with INH and RIF should be extended to seven months, for a total treatment duration of nine months.[16] Six-month regimens are not appropriate for persons who have both tuberculosis and HIV infection. In these patients, treatment should be continued for at least 9 to 12 months and at least 6 months after the sputum cultures have become negative.[16] Patient compliance is very important in tuberculosis treatment.

If the sputum culture has not converted to negative within two to three months, the patient should be evaluated for poor compliance or drug resistance. Since *M. tuberculosis* is capable of rapidly becoming drug resistant, successful treatment depends on using at least two antimycobacterial agents to which the organism is sensitive. It is essential, therefore, that one never add a single drug to a failing regimen.[16] Consultation on patient management is available from local health departments and from the Maryland Division of Tuberculosis Control (410-225-6698).

Recent reports of outbreaks of multiple-drug-resistant tuberculosis,[43-46] the increasing prevalence of drug resistance among reported cases, and the recent unavailability of several standard antimycobacterial drugs[47] highlight the need to develop new antibiotics. The last major drug introduced for tuberculosis treatment was rifampin, introduced two decades ago. Some fluoroquinolones or macrolides may have limited usefulness, particularly in the treatment of multiple-drug- resistant tuberculosis.[48-54]

Infection control

Since the currently recommended treatment regimens rapidly render the person with tuberculosis noncommunicable, the at-home isolation period, for most persons, has been reduced to two to three weeks unless drug resistance is suspected or the patient is immunosuppressed.[42] After this period, the person may return to normal activities of daily living while taking oral medication over the next six months. For those with drug-resistant disease, the restriction period is longer, but many of these patients may also be managed quite successfully at home with assistance from the local health department.

When persons suspected of having pulmonary tuberculosis are admitted to hospitals, they should be placed on acid-fast bacilli (AFB) isolation. AFB isolation procedures include placement in a private room with adequate ventilation, which is vented directly to the outside away from air intakes and people. The air flow direction must be from the clean area to the contaminated (patient-occupied) area (i.e., the patient's room should be under negative pressure). This negative pressure is best maintained by close-fitting doors that are kept closed. AFB isolation is not necessary for patients having only extrapulmonary involvement unless there is a risk of *M. tuberculosis* aerosolization into infectious droplet nuclei.

When health care workers enter the room or perform clinical procedures, the risk of infected droplet nuclei inhalation can be

reduced by use of well-fitted, disposable particulate respirators capable of filtering out particles >1 micron in diameter.[55] The CDC and the Occupational Safety and Health Administration (OSHA) continue to consider recommendations of the National Institute for Occupational Safety and Health (NIOSH) on the use of powered air-purifying respirators and on dust, mist, and fume respirators.[56]

Staff involved in the care of tuberculosis patients and those who process clinical specimens in the mycobacteriology laboratory should have a Mantoux skin test on employment. Those with negative baseline skin tests should be retested, at least annually. Any staff member whose skin test converts to positive should be offered preventive therapy.[25]

Prevention

The first weapons in our prevention arsenal are early diagnosis and effective treatment of pulmonary tuberculosis. These minimize the chance that uninfected contacts will be exposed to infective droplet nuclei and become infected.

When individuals become infected with *M. tuberculosis* through inhalation of infective droplet nuclei, they have a 5% risk of progressing to active disease within the next two years. Thereafter, the risk is 5% for the individuals' remaining lifetime. The lifetime risk is markedly increased in persons with HIV infection and has been estimated to be more than 5% per year.[19]

The majority of tuberculosis cases reported each year develop in persons with latent tubercle bacillus infection. Most are preventable with INH chemoprophylaxis. Preventive INH therapy is safe and effective when used as recommended. Preventive therapy is recommended for persons with a positive tuberculin skin test who are at high risk of progression to active tuberculosis. This group includes persons who have been in recent close contact with someone who has tuberculosis, persons whose chest films show stable fibrotic lesions, persons whose skin tests have become positive in the past 24 months, and persons with special medical conditions that increase their risk. Increased tuberculosis risk has been associated with HIV infection as well as the conditions presented in **Table 1.** Preventive therapy is also recommended for anyone who is skin test positive and 35 years of age or younger. For those over 35 years of age, in the absence of another factor that increases the risk of developing tuberculosis, INH preventive therapy is not recommended because of the increasing risk of INH-associated hepatitis with advancing age.[10,11,25]

The Division of Tuberculosis Control currently recommends daily preventive therapy with INH, 10 mg/kg, not to exceed 300 mg/day, for at least 6 continuous months but not more than 12 months. We recommend that the duration of preventive therapy be increased to at least 12 months for persons whose chest x-rays show fibrotic lesions measuring >2 cm^2 and for persons with HIV infection.[16]

The only vaccine currently available is BCG. This vaccine has been used extensively throughout the world, particularly in third-world countries. The BCG vaccine effectiveness is variable, and it may not prevent infection.[57,58] Tuberculosis is a major cause of morbidity and mortality throughout the world. Researchers continue to look for a more effective vaccine.[59,60]

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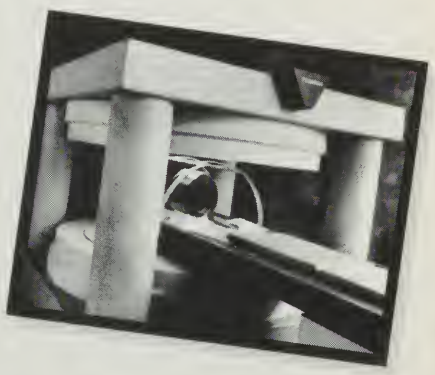
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Substance abuse as a factor in the causality, severity, and recurrence rate of traumatic brain injury

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ABSTRACT: *The effects of substance abuse on the cause, severity, and recurrence of traumatic brain injury in 322 admissions to a large rehabilitation inpatient facility are explored. Study patients tended to be young and predominantly male. Few had completed high school and a significant minority had a history of cerebral dysfunction. Patients tended to have moderate to severe closed head injuries. Motor vehicle crashes were the most common cause of injury, but patients reporting drug or drug and alcohol abuse were more likely to sustain violent injuries (e.g., gunshot wounds).*

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One of the most substantial risk factors for traumatic brain injury is substance abuse—both chronic use and use immediately prior to trauma. In one series of patients hospitalized for traumatic brain injury, 25% had been treated previously for alcohol abuse.[1] One-half or more of fatally injured drivers and pedestrians described in another series had a history of excessive alcohol use.[2] Spradeo and Gill[3] found that, of 102 patients admitted to a large trauma center for head injury, 67% of those tested had a positive blood alcohol level, with about half of those tested being intoxicated (100 mg/100 ml). Thirty percent of a group of adult pedestrian trauma patients had consumed alcohol prior to injury.[4] The American Medical Association's Council on Scientific Affairs concluded that between 40% and 55% of fatally injured drivers had blood alcohol concentrations of .10% or more.[5] Of a series of patients sustaining head injuries in domestic accidents serious enough to warrant admission, 46% had used alcohol.[6]

In recent years, evidence has begun to accumulate for the association of abused substances, other than alcohol, with traumatic injury. Investigators at an urban trauma center reported that 65% of patients with trauma sustained in a violent crime and 43% of those with trauma related to

Table 1. History of head injury and substance abuse among 322 patients with traumatic brain injury

History of head injury	
Yes	27%
No	70%
Unknown	3%
History of substance abuse	
Alcohol	33%
Drug	8%
Alcohol and drug	29%
None	30%

accidental injury had used cocaine.[7] Milner[8] observed that marijuana users had twice the expected frequency of traffic crashes, while Soderstrom and colleagues[9] found that a third of patients seen at a major trauma center tested positive for marijuana. O'Donnell and coworkers[10] found that 62% of 47 patients with traumatic spinal cord injury and admitted to a rehabilitation setting had alcohol- or drug-related injuries.

Although data clearly implicate substance use as a risk factor for injury, the relationship between chronic substance abuse, severity of trauma, and the course of recovery remains largely unknown. The severity of traumatic brain injury can be measured by many different methods. The Glasgow Coma Scale (GCS) score, length of posttraumatic amnesia (PTA), and, to a lesser degree, length of hospitalization are some of the most commonly used. Other investigators[11,12] found that alcohol intake prior to trauma is associated with increased severity of injury. Spradeo and Gill[3] reported increased length of stay, longer duration of agitation, and poorer cognitive status at discharge in head-injured patients with admitting blood alcohol levels of 100 mg/100 ml or greater.

Other recent papers in this journal have reviewed the epidemiology,[13] comorbidity factors and ancillary medical requirements,[14] and outpatient management[15] of brain-injured patients. We explored the effects of substance abuse on the cause, severity, and recurrence of traumatic brain injury in 322 admissions to a large rehabilitation inpatient facility.

Table 2. Causes of head injury among 322 patients at a rehabilitation hospital

Car crash	34%
Motorcycle crash	15%
Pedestrian struck	11%
Fall	12%
Blunt assault	14%
Gunshot wound to the head	6%
Other	8%

We also identified the distinguishing characteristics of traumatic brain injury patients with and without evidence of substance abuse.

Method

The sample for this study comprised 322 patients admitted to the Brain Injury Unit at Montebello Rehabilitation Hospital over a four-year period between 1988 and 1991. This unit provides acute multidisciplinary medical rehabilitation to individuals with traumatic brain injury and related disorders. For purposes of the present project, only patients with cerebral insults of traumatic origin were included. Patients typically are admitted approximately one month after injury and remain in rehabilitation approximately seven to eight weeks.

Study data were taken from a Brain Injury Unit database maintained by the authors. Database material is gleaned from a combination of review of the medical records as well as the history and physical examination by the attending physician, clinical interview of the patient by a neuropsychologist, and a detailed social history obtained by the staff social worker from a patient's family member. Determination of the presence of substance abuse reflected the unit's senior neuropsychologist's clinical judgment following a review of information from the above three sources.

Substance abuse is defined by *DSM III-R*[16] criteria as a maladaptive pattern of substance use persisting for at least one month (or repeatedly over a longer period). The *DSM III-R* also requires that the patient not qualify for a diagnosis of substance dependence to receive a substance abuse diagnosis. In our setting, however, there often was insufficient information to determine if an individual met the more rigorous criteria for substance dependence, and some individuals characterized as substance abusers probably met the criteria for dependence. For purposes of the present study, patients were categorized into one of four substance abuse categories: (1) alcohol abuse, (2) drug abuse, (3) alcohol and drug abuse, or (4) no substance abuse.

For data analyses involving continuous variables, analysis of variance (ANOVA) was used. For analysis involving discrete variables, the chi-square test was used.

Results

Patients tended to be young (mean age, 34.7±13.8 years) and predominately male (85%). Many had failed to complete high school. A significant minority had a history of cerebral dysfunction prior to their current injury. The majority had a reported history of substance abuse (**Table 1**). Review of injury severity data suggests that these patients tended to have moderate to severe injuries (mean acute admitting GCS score, 9.5±3.6; duration of PTA, 36.9±34 days), and the vast majority had closed head injury (86%). Motor vehicle crashes were the most common cause of injury, but other etiologies were also well represented (**Table 2**).

Table 3. Relationship of substance abuse to demographic and injury severity variables

	No substance abuse (n=98)	Alcohol abuse (n=107)	Alcohol & drug abuse (n=93)	Drug abuse (n=24)	F	p
Age	36.7*	38.3**	30.3	27.5	9.02	<.0001
	(16.8)	(14.4)	(8.3)	(6.5)		
Education	11.8***	11.1	10.3	11.1	5.20	<.002
	(2.5)	(2.8)	(2.5)	(1.5)		
GCS score	9.6	10.1	9.0	8.3	2.11	NS
	(3.7)	(3.7)	(3.4)	(3.6)		
Length of PTA	39.6	37.3	32.9	37.6	.55	NS
	(36.4)	(39.6)	(25.3)	(23.9)		
Acute hospitalization	31.4	34.9	30.8	36.2	.91	NS
	(18.3)	(25.8)	(18.5)	(24.0)		
Rehabilitation hospitalization	61.4	57.1	51.3	55.5	.95	NS
	(45.0)	(41.5)	(40.1)	(34.4)		

Contents of cells are group means and standard deviations.
Alpha levels were adjusted for the number of comparisons (Tukey HSD Multiple Comparisons).
**p<.05 compared with drug and with alcohol and drug groups*
***p<.01 compared with drug and with alcohol and drug groups*
****p<.001 compared with alcohol and drug groups*
GCS = Glasgow Coma Scale; NS = not significant; PTA = posttraumatic amnesia

Inferential data are summarized in **Table 3**. Analyses of patients' ages indicate statistically significant differences among substance abuse groups ($F [3,317] = 9.02, p = .00001$). Patients with no prior history of substance abuse were significantly older than patients with a history of drug abuse and patients with an alcohol and drug history. Similarly, patients with a reported history of alcohol abuse were significantly older than patients in the drug and in the alcohol and drug groups.

Additional analyses of demographic data revealed an overall significant difference between substance abuse groups in years of education ($F [3,311] = 5.20, p = .0016$). Patients with no history of substance abuse had more years of education than subjects reporting an alcohol and drug history ($p < .0005$). No other comparisons of substance abuse groups on educational levels revealed statistically significant differences.

Twenty-seven percent of patients in this sample had sustained a prior head injury (**Table 1**). Analysis of the relationship between type of substance abuse and history of prior head injury revealed that patients reporting no substance abuse history were least likely to have a prior head injury ($\chi^2 [3, N=322] = 11.69, p = .009$). Sixteen percent of the no substance abuse sample had a prior head injury compared with 22% of the drug abuse, 31% of the alcohol abuse, and 38% of the alcohol and drug abuse samples.

Univariate analyses of variance found no significant differences among the four substance abuse groups on measures of injury severity (**Table 3**). Groups did not differ with regard to GCS scores at the time of admission to an acute hospital ($F [3,258] = 2.105, p = .10$) or in the mean length of PTA ($F [3,274] = 0.548, p = .650$). There were also no differences between the substance abuse groups in either mean lengths of stay of acute hospitalization ($F [3,311] = 0.910, p = .436$) or mean lengths of rehabilitation hospitalization ($F [3,318] = 0.945, p = .0419$).

As shown in **Table 4**, patients reporting either drug abuse or drug and alcohol abuse were more likely to sustain violent injuries (e.g., gunshot wounds or blunt assault) than patients reporting only alcohol or no substance abuse ($\chi^2 [3, N=318] = 13.94, p = .003$). Thirty-seven percent of the drug abuse sample and 30% of the drug and alcohol abuse sample sustained violent injuries compared with 16% of the alcohol sample and 13% of the no substance abuse sample.

Discussion

Our patient population was somewhat biased toward more severe trauma in that it included only patients who required inpatient rehabilitation subsequent to trauma. Also, our institution is such that ability to pay for rehabilitation is not a determinant of admission. This could have resulted in admission of patients with a lower socioeconomic status than those admitted to other private facilities. Taking these limitations into consideration, we believe that our patient population is highly representative of the population that suffers traumatic brain injury in the United States.

Table 4. Nonviolent vs violent cause of injury with substance abuse

	No substance abuse	Alcohol abuse	Alcohol & drug abuse	Drug abuse
Nonviolent	85	90	62	15
Violent	13	17	27	9

Contents of cells are numbers of subjects.

Among victims of traumatic brain injury, drug abusers, with or without an alcohol abuse history, tended to be younger than patients who abused only alcohol or had no substance abuse history. Drug abuse appears to enhance the risk for brain injury relatively early in adult life. Also, patients with no history of substance abuse had more years of education than patients reporting such history. Others have noted that academic deficiency serves as a risk factor for brain injury.[17] Our data at least raise the possibility that academic deficiency interacts with substance abuse to increase this risk.

We did not find any significant differences in severity of traumatic brain injury as measured by GCS score, PTA, or length of acute or rehabilitation hospitalization among patients with no history of substance abuse or the three groups of patients with this history. While we believe this to be an important finding, our conclusion has several possible limitations.

First, our sample was restricted in that it primarily contained patients with relatively severe injuries; a restriction in the range of scores reduces the probability of detecting significant relationships. It is of interest that follow-up analysis did find, as expected, a significant correlation between GCS scores and length of both acute hospitalization ($r [254] = -0.274$, $p < .001$) and rehabilitation hospitalization ($r [260] = -0.356$, $p < .001$). There were even more striking correlations between PTA and length of acute hospitalization ($r [271] = 0.425$, $p < .001$) and length of rehabilitation hospitalization ($r [276] = 0.626$, $p < .001$). Because these correlations are significant and in the expected direction, it seems unlikely that our failure to find relationships between the presence of substance abuse and injury severity is merely an artifact of restricted range-of-severity scores.

Second, we did not, as others have, evaluate whether patients had used substances immediately prior to injury. It is difficult to compare our studies with other studies that have done just this. We do find this conclusion, however, to be interesting, since we would expect that the additive effect of both a history of substance abuse and trauma would amplify the injury severity. We find it encouraging that a history of substance abuse did not complicate the care of brain-injured patients to the extent that more lengthy hospitalization was required. It is possible that substance abuse might affect other aspects of recovery from traumatic brain injury, including functional and neurobehavioral outcome. We are currently evaluating this possibility.

In our study, there was a strong correlation between drug use and suffering a violent, as opposed to nonviolent, traumatic brain injury. Although this finding is not surprising, we are not aware of it having been reported in the past. Lindenbaum and colleagues[7] reviewed the toxicology screens of 169 patients admitted to an urban trauma center (type of trauma varied) and found that, for patients sustaining trauma in violent crimes, 49.9% tested positive for drugs that were illicit or had abuse potential, 30.9% tested positive for drugs and alcohol, 6.2% were positive for alcohol only, and 13.5% had negative screens. There was also a high incidence of positive screens for drugs (with or without alcohol) in patients with accidental injuries in their sample.

More patients in the violent crime groups tested positive for drugs than those in the accidental injury group, but the difference was not statistically significant. When specific drugs were examined, a significantly greater number of patients in the violent crime groups tested positive for cocaine. While the methodologies of the two studies vary, both point to an increasing role of drug abuse in the causation of trauma. The specific association with traumatic brain injury and with violent crime deserves evaluation in other samples.

Finally, we found a strong correlation between a substance abuse history and the risk of having suffered a traumatic brain injury in the past. It is well known that a history of head injury puts a patient at substantially higher risk for further head injuries, but the mechanism for the additional risk has not been delineated. Our data strongly suggest that substance abuse, at least in part, contributes to this increased risk. This has been our informal clinical impression for some time. The effects of traumatic brain injury may be cumulative.[18] Patients who have sustained brain injuries should be offered counseling and support by their physician, emphasizing that substance abuse may increase the risk of re-injury and compromise the long-term outcome. In many cases, formal substance abuse treatment may be appropriate.

Unfortunately, without any degree of cynicism, many staff members in acute care and rehabilitation settings comment on the brain injury that is waiting to occur. Such individuals are aware of a "syndrome" comprising youth, fast-moving vehicles, a poor school record, non-use of helmets and other protective gear, and substance abuse. There are state-of-the-art settings to manage the immediate and long-range negative results of the traumatic event. The time has come, however, to place greater emphasis on prevention, a theme reflected in other settings in the health care industry. These efforts will include not only the health care worker and the individual at

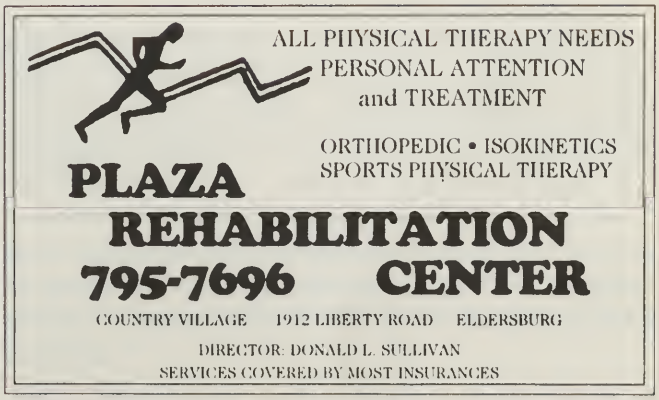
risk, but also educators, law enforcement personnel, and those formulating health care policy, as well as those responsible for paying the bill.[19]

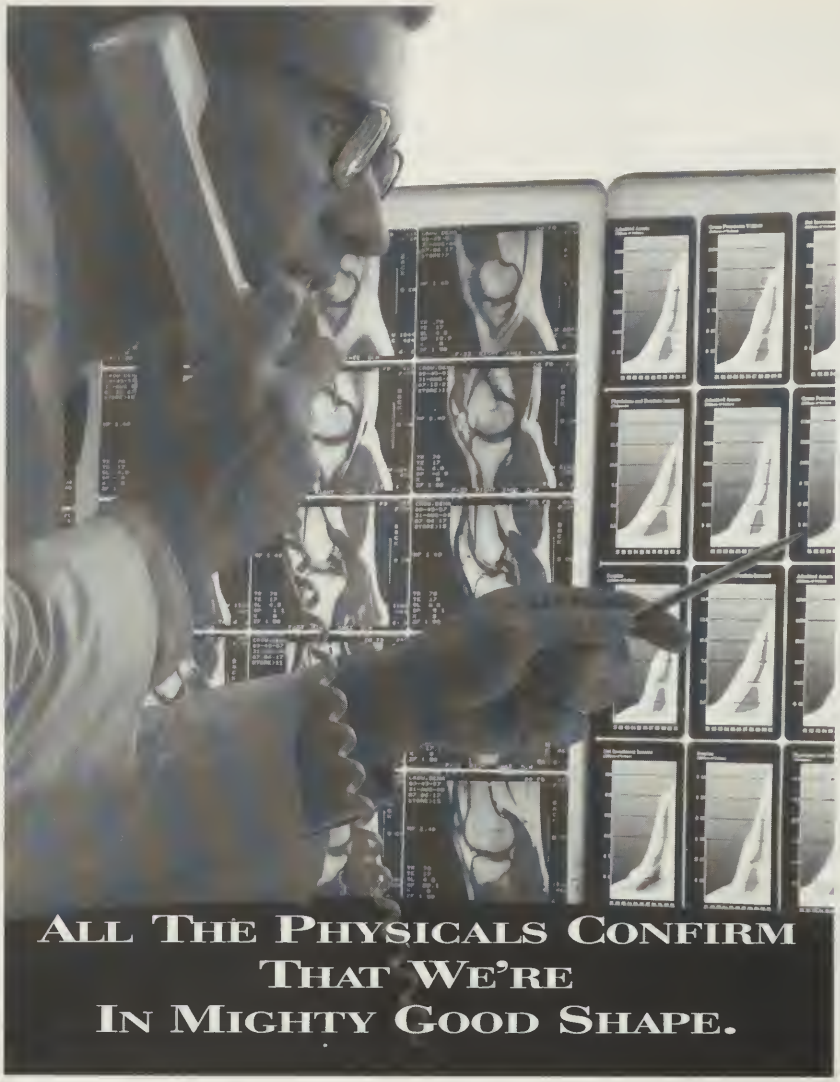
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Characteristics of epidemic hepatitis A in Baltimore City: Implications for control measures

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ABSTRACT: *In 1988, a hepatitis A epidemic began in Baltimore, Maryland. A total of 607 cases were reported to the Baltimore City Health Department between the period November 1, 1988, and December 31, 1989. The health department conducted case investigations to identify factors important to the development of control measures. Immunoglobulin was given to appropriate contacts, and an educational campaign was initiated.*

Of the 607 reported cases, 63% were white and 57% were male. Cases were geographically clustered within 5 of Baltimore's 23 zip codes. Among the 242 adults interviewed, 43% self-reported drug use and 44% were unemployed. Twenty-one percent of the adults and 56% of the children reported contact with either a suspected or confirmed case of hepatitis.

Despite control efforts, the epidemic continued through 1990. Barriers to implementing traditional control measures resulted in continuing transmission of hepatitis A in the community.

Nationwide epidemics of hepatitis A have not been noted since 1971, and from that year through 1983, the reported hepatitis A incidence declined. Beginning in 1984, however, national rates began to increase, from 9.3 per 100,000 in 1984 to 14.4 per 100,000 in 1989. The initial rate increases resulted from epidemic cycles in the western United States followed by increases in the eastern United States beginning in 1988.[1]

According to national data, over the past three decades there have been demographic changes in those groups infected by hepatitis A.[1-3] Additionally, drug abusers and adults have become recognized as a group at risk for hepatitis A infection.[4-7]

Along with many other states, Maryland experienced an increase in reported hepatitis A cases beginning in 1988.[8] Baltimore City was particularly hard hit, with 40 cases reported in 1988, increasing to 597 in 1989.

The rapid spread of hepatitis A in hard-to-reach groups in Baltimore made the source of this epidemic problematic to define, and control measures difficult to implement. The Baltimore City Health Department (BCHD) conducted expanded case investigations to explore possible causes of the epidemic, identify target populations for control measures, and identify factors that might influence control measures.

Methods

Case reporting. A case of hepatitis A was defined as a Baltimore city resident who had a positive HAV IgM (hepatitis A virus immunoglobulin M) antibody test, with or without symptoms. Since date of onset was often not reported, the "action date" of each case was defined as the earliest of the following dates: date of onset of symptoms, date of blood specimen collection, or date of hospitalization. Cases included in the analysis were those reported between November 1, 1988, and December 31, 1989, who had an action date within that period.

Case investigation. As the beginning of the hepatitis A outbreak was identified, all cases reported to the BCHD within one month of the action date were referred to 15 district nurse investigators for home investigation. Nurses used a standard risk assessment questionnaire and provided education. If contact was not made on the initial home visit, a letter was left asking the case to call the health department. Cases were closed after multiple unsuccessful attempts to contact cases. As the epidemic progressed, limited staffing precluded investigation of some cases.

Control measures. All close contacts (household members, sexual partners, or those spending significant time in the case household) without a prior history of hepatitis A were referred for immunoglobulin (Ig), if it could be administered within two weeks after the last exposure.[9] In August 1989, in an effort to stop tertiary spread, the BCHD decided to allow contacts to receive Ig up to four weeks after exposure. Cases and contacts were educated about preventing transmission by appropriate hygiene and hand washing and were given fact sheets on hepatitis A. Per Maryland regulation, food handlers were excluded from work until one week after the onset of jaundice, or two weeks after the onset of symptoms if the individuals were not jaundiced.

Educational interventions. In August 1989, a medical bulletin was sent to all licensed physicians and health care facilities in the Baltimore metropolitan area. The bulletin included background information on diagnosis, epidemiology, and prevention, and stressed the importance of prompt reporting and the necessity of providing Ig to contacts.

In addition, a joint press release from Baltimore City, Baltimore County, and the Maryland Department of Health and Mental Hygiene (DHMH) was released in August 1989, public service announcements were presented, community presentations were given to public groups, and in-service training on the epidemiology and prevention of hepatitis A infection was provided to physicians and infection control practitioners.

Data analysis. Data were abstracted from reporting forms and case investigation questionnaires using a standardized data collection instrument. Rates were calculated using the number of cases identified during the 14-month study period and 1990 census figures for Baltimore City.[10]

Treatment-seeking delay (i.e., the time from the onset of illness to the date the case was seen by a health care provider) was analyzed by comparing the date of onset of symptoms to the date of blood work (which was used as a proxy for the visit date to a health care provider). Data from a sample of 41 cases with onset in July and August 1989 were used to analyze reporting delays by comparing time between onset of illness, date seen by a health care provider, date the BCHD first became aware of the case, and date the case was located by nurse investigators.

To estimate baseline susceptibility to hepatitis A in a young, inner city population, a blinded seroprevalence survey of HAV IgG antibody was conducted on the sera of 150 young adult clients of BCHD's clinic for sexually transmitted diseases (STD). Data were computerized and analyzed using the Statistical Analysis System for Personal Computers (PC SAS, Cary, North Carolina). The chi-square test[11] was used to assess the relationship between selected variables and locate-for-interview status.

Results

The number of hepatitis A cases in Baltimore City in the 14-year period 1979 through 1992 is shown in **Figure 1**. During the period November 1, 1988, through December 31, 1989, 607 cases of hepatitis A were reported to the BCHD (**Figure 2**). Cases peaked in August and September 1989 (approximately 90 cases per month) following release of the medical bulletin and press coverage in August.

Hepatitis A infection rates per 100,000 by age, race, and sex are shown in **Figure 3**. Of the 607 reported cases, 345 were males (rate of 100 per 100,000) and 262 were females (67 per 100,000). The median age of cases was 24 years among females and 28 years among males. Males outnumbered females in all age categories except those 15 years of age or younger. Whites had a rate of 133 per 100,000 (383 cases) compared with a rate of 50 per 100,000 for nonwhites (184 African Americans, 2 Hispanics, and 38 cases of unknown race). Most cases were among adults 18 years of age and older (459, 83 per 100,000). The rate among children less than 18 years of age was 76 per 100,000. Of note is the remarkable difference in sex-specific rates by race among children (**Figure 3**).

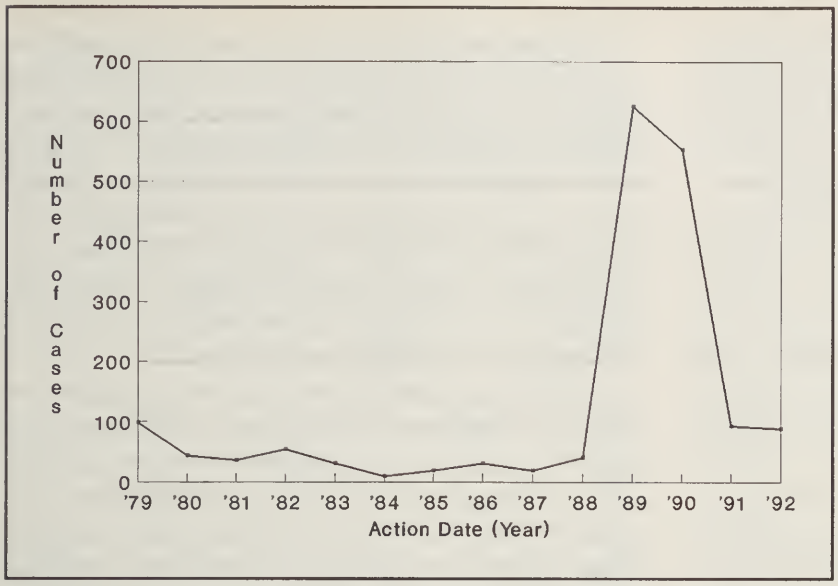


Figure 1. Number of cases of hepatitis A by action date (years).

The cases were geographically clustered in the southwest portion of the city (**Figure 4**). Almost two-thirds (61%) of the cases occurred within 5 of Baltimore's 23 zip code regions, and 30 or more cases were reported from each of these 5 regions.

Fifty-seven percent of cases (343) were located for a more extensive follow-up interview (**Table 1**). There were no significant differences between those located and those not located with regard to race or sex. The proportion of children (< 18 years of age) or their informants was significantly greater, however, among those located vs those not located (28% vs 15%, $p < .001$). A significantly higher proportion of those located resided in the zip code areas from which 30 or more cases were reported ($p = .002$).

Among the 343 cases located for interviews (**Table 2**), 59 (17%) reported household contact with a child under two years of age. No day-care centers were identified as sites where infection occurred.

Although most cases reported good hygiene practices, the opposite was noted in field investigations. For example, diaper changing on food preparation areas and inadequate hand-washing practices were described by some cases in response to directed questions regarding hygiene; conditions of crowding and poor hygiene were noted during home visits by investigators.

One hundred and five (43%) of the 242 adult cases (31% of all interviewed cases) admitted to drug use, with cocaine being the most common substance used. Forty-four percent of adults interviewed were not employed (i.e., unemployed, not currently seeking employment, or homemakers), and 2% were retired. Seven percent were food handlers. Three cases (1%) were health care providers with direct patient contact.

Only one food-borne outbreak was identified, which accounted for five cases. The food handlers who served as the source of this outbreak had not been diagnosed as having hepatitis A and, therefore, were unreported cases prior to recognition of hepatitis A in patrons.

Among the 198 cases for whom we had information on treatment-seeking delay, approximately 30% waited more than seven days after onset of symptoms to seek medical care. Among the 41 cases reviewed for reporting-delays, 36 had information sufficient for evaluation. The median delay between symptom onset and physician visit was 7 days (range 0 to 19). The median delay between physician visit to receipt of first report (either laboratory or physician report) at the BCHD was 6.5 days (range 0 to 33). Nine of the 36 cases (25%) were not able to be located for interview. Of the remaining 27 cases, the delay between the receipt of report and locating was a median of 8 days (range 1 to 42). Overall, only 1 out of 36 (3%) was reported within seven days of onset, and 17 (47%) were reported between 7 and 14 days of symptom onset. The remaining 50% were reported more than 14 days after symptom onset. None of the 36 were located within 14 days of onset for interviews and Ig administration to contacts. Twenty percent of sera in the blinded seroprevalence survey for HAV IgG antibody in young adults attending the STD clinic demonstrated immunity to hepatitis A virus.

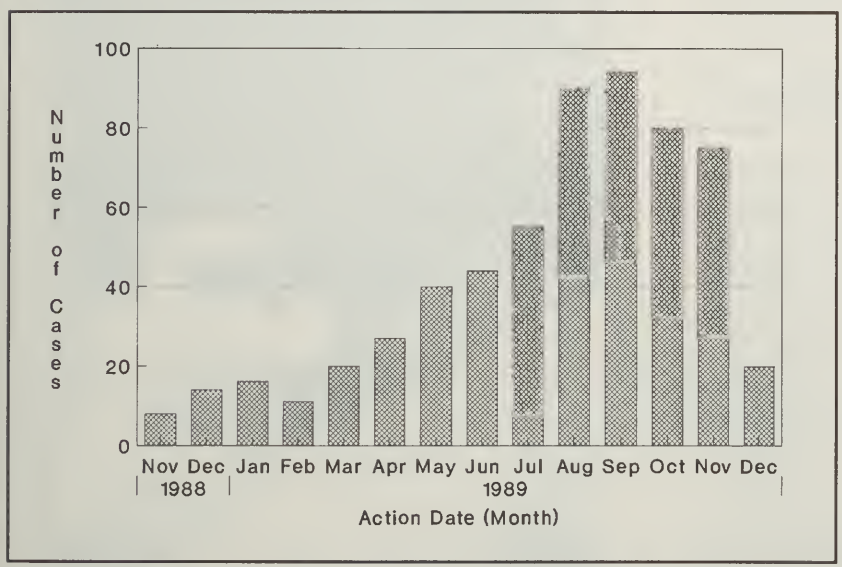


Figure 2. Number of cases of hepatitis A by action date (months). An additional 39 cases with action date in December 1989 were reported in 1990 and not included in this analysis.

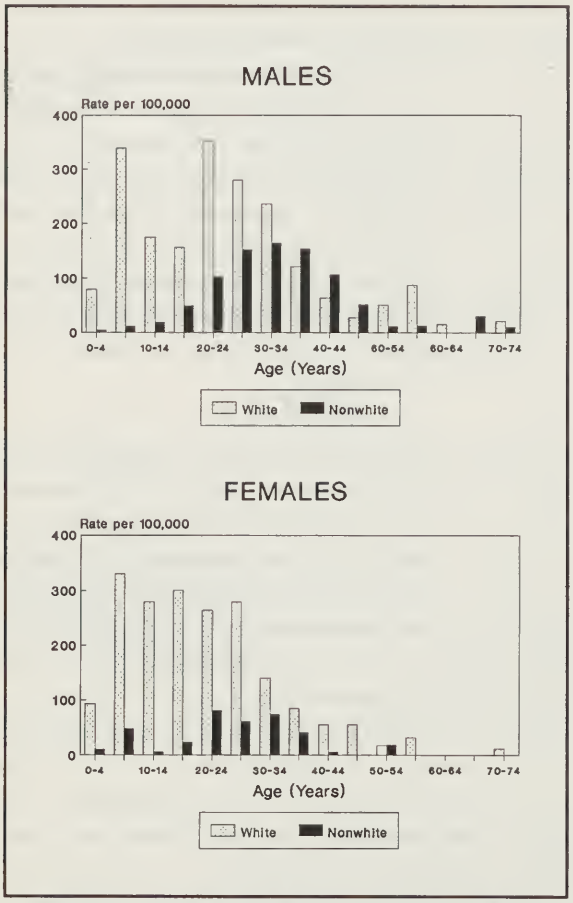


Figure 3. Hepatitis A infection rates per 100,000 by age, race, and sex.

Discussion

Baltimore experienced a hepatitis A epidemic unparalleled in the past 15 years (**Figure 1**). In the epidemic's early stages, neighborhood clusters were evident, and HAV transmission in these areas remained high despite active case investigation, education, and attempts at timely Ig administration. This epidemic affected many young adults and children and was without a clearly identifiable source.

Serologic studies of antibody to hepatitis A antigen indicate that antibody prevalence increases with decreasing socioeconomic status (SES).[3,12-13] SES indicators may serve as a proxy for other, unidentified factors that promote hepatitis A infection, such as household crowding or sanitary conditions. In the five zip code areas accounting for almost two-thirds of the cases, approximately 30% of residents were below the poverty level,[14] and 42% of households had an estimated 1990 income of less than $16,000.[15] These data are comparable with other zip code areas of the city, however, and suggest that SES status alone does not explain why the epidemic occurred in certain city areas and not others. Poor hygiene has been associated with hepatitis A infection[12-13] and may have played a role in this epidemic.

Thirty-one percent of interviewed cases reported drug use. This proportion is higher than that seen in national samples of hepatitis A cases; 14% of cases reported to the Viral Hepatitis Surveillance Program in 1987 reported drug use.[1] County-based outbreak data, however, indicate proportions of drug users that are comparable to that seen in Baltimore. For example, 28% to 58% of cases were drug users in four hepatitis A outbreaks in upstate New York counties. Drug users comprised 34% of hepatitis A cases identified in a northern California county during the first half of 1987.[4]

A causal relationship between drug use and hepatitis A cannot be established in the epidemic described here; neighborhood controls were not interviewed to determine drug use levels in the community, and it is possible that the large number of drug users in this epidemic reflects the high number of drug users in Baltimore. Baltimore City comprises 17% of the state population, yet accounts for 37% of the state total of drug users in treatment.[16] Active investigation and identification of outbreaks where drug use involvement is suspected has been recommended by the Centers for Disease Control and Prevention. This segment of the population may be unresponsive to currently available education and prevention efforts, and thus may be candidates for HAV vaccines that are under development.[4]

The 20% HAV seroprevalence seen in the predominantly heterosexual clients[17] of a Baltimore STD clinic is surprisingly high given the low level of hepatitis A reported in Baltimore

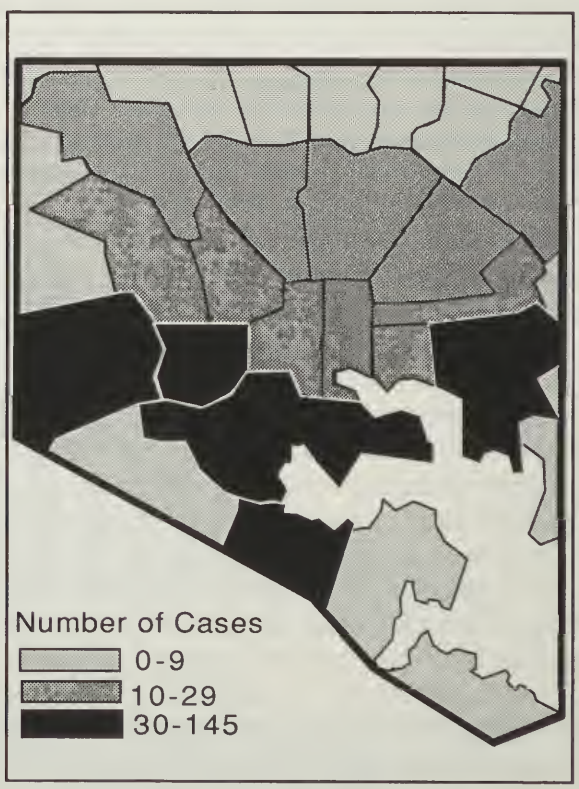


Figure 4. Hepatitis A cases by zip code area.

over the past 12 years. In a survey of 157 men attending a Seattle STD clinic, 12% of heterosexual and 30% of homosexual men were immune to hepatitis A.[18] Nonetheless, the fact that 80% of Baltimore STD clinic clients had not acquired immunity to hepatitis A indicates a large susceptible population of young adults.

Ig administration to contacts within two weeks of exposure has been recommended to protect against clinical illness.[9] Due to the fact that almost half the cases could not be located, however, this recommendation was difficult to implement. To maximize the number of cases located in an outbreak as extensive as this, it is imperative that adequate field staff devoted to ongoing investigation of cases and the resulting cluster associations are available.

Delays in seeking treatment and reporting, and delays in locating or inability to locate cases for interview created problems in the timely use of Ig as a control strategy. To expedite effective administration of Ig prophylactically, we suggest the following: (1) administer Ig to contacts during field investigations and encourage physicians in the community to give Ig to contacts when the cases seek treatment; (2) establish temporary, community-based health centers where Ig shots may be easily obtained; and (3) stress the importance of timely reporting by physicians and laboratories to the health department. In a survey by the Vermont Department of Health on communicable-disease reporting, common reasons for noncompliance in reporting were the assumption by the physician that the laboratory had reported the case of hepatitis or a lack of knowledge by physicians of reporting requirements.[19] Therefore, we suggest providing in-service training to laboratories and physicians regarding how to report cases of hepatitis A and how to refer contacts to the health department for administration of Ig.

Immunoglobulin prophylaxis has not been found to prevent sustained transmission in other community outbreaks,[12] but has been successful in the control of smaller outbreaks.[20] When it became evident that control measures to stop secondary spread were not effective in halting the epidemic, the BCHD began to provide Ig shots for contacts up to four weeks past exposure in an effort to stop tertiary spread and decrease clinical symptoms. We were unable to document the benefit of this action. The outbreak continued in 1990 with a mean of 44 cases per month (range 11 to 82). With no change in control strategies or reporting, however, the number of cases dropped to a mean of 8 cases per month (range 5 to 13) during the period January through September 1991, and remained at baseline throughout 1992.

Behavioral risk factors such as poor hygiene and drug use are difficult to change fast enough to stop viral spread in an epidemic as extensive as that experienced in Baltimore. Intensive case investigation, contact elicitation, and a liberal policy of Ig administration may be successful in preventing secondary cases. To control an epidemic of this size requires a sense of urgency in the community that includes participation by the medical community and citizens of the city. Activation of community groups and media presentations are both quick and cost-effective ways to disseminate information.

Table 1. Demographic characteristics of hepatitis A cases by locate-for-interview status

	Locate (N=343) N (%)	Non-locate (N=264) N (%)
Sex		
Male	187 (54)	158 (60)
Female	156 (46)	106 (40)
Race		
White	232 (67)	151 (57)
Nonwhite	106 (31)	80(30)
Unknown	5(2)	33 (13)
Age (p < .05)		
< 18 years	98 (28)	38 (15)
18+ years	242 (71)	217 (82)
Unknown	3 (1)	9 (3)
Residence (p < .05)		
Zip code with 30+ cases	229 (67)	144 (55)

Table 2. Risk factors by age of 340 hepatitis A cases located for interview*

	< 18 years (N=98) N (%)	18+ years (N=242) N (%)
Household contact with child under two years	18 (18)	41 (17)
Any contact with child under two years	28 (29)	46 (19)
Contact with case	55 (56)	50 (21)
Seafood	33 (34)	101 (42)
Drug use	2 (2)	105 (43)
Marijuana	1 (1)	63 (26)
Cocaine	-	69 (29)
Injected	-	58 (24)
Inhaled	-	27 (11)
Crack	-	9 (4)
Heroin	-	44 (18)
None of the above	18 (18)	47 (19)

**Risk groups are not mutually exclusive; three cases excluded for whom age was unknown.*

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Acknowledgments

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Infection in major sickle hemoglobinopathies: Should management strategies change?

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ABSTRACT: *Four children with major sickle hemoglobinopathies developed severe pneumococcal infection. Three had sickle cell hemoglobin C (Hb SC) disease and one had sickle cell anemia (Hb SS). In three instances, there was a fatal outcome. The authors' experience with these cases leads them to question whether any patient with a major sickle hemoglobinopathy should be excluded from receiving prophylactic penicillin or if outpatient management with long-acting cephalosporin treatment in the sickle cell patient with suspected sepsis is appropriate therapy.*

Young children with sickle cell anemia are at high risk for developing overwhelming infection with encapsulated bacteria. Strategies to address this problem have included prophylactic penicillin, polyvalent vaccine against the more common pneumococcal subtypes, and *Hemophilus influenzae,* type b (Hib) vaccine. Protocols requiring prompt evaluation, empiric use of intravenous antibiotics, and mandatory hospitalization of children with sickle cell disease and high fevers have been used in a number of centers.

Some institutions, however, do not use prophylactic penicillin in all patients with major sickle hemoglobinopathies, and it remains unclear at what age it is safe to discontinue its use. In addition, the use of cephalosporin with a long half-life has promoted some institutions to change policies by emphasizing outpatient management on selected patients as opposed to routine admissions. Because of our experience with the subjects of this report, we question the safety of discontinuing prophylaxis and changing management strategies for suspected sepsis.

Case reports

Case 1. An 11-year-old African-American boy with sickle cell hemoglobin C (Hb SC) disease was transferred to Sinai Hospital with fever and vomiting. His past medical history was significant for pneumococcal meningitis at 2 years of age, with residual profound bilateral sensorineural deafness. He had received *H. influenzae*, type b (Hib) vaccine, but had never taken prophylactic penicillin nor received pneumococcal vaccine. He had been successfully treated as an outpatient for all occasional pain crises.

One day prior to admission, he developed a sore throat and right knee pain. On the day of admission, he vomited several times at school—a special institution for the hearing impaired. He had a fever unresponsive to acetaminophen, and his right knee pain had increased in severity. He was taken to a community hospital emergency room. His temperature was 104.6° F, pulse was 138/min, respirations were 16/min, and blood pressure was 103/58mm Hg. He was alert and cooperative, and his physical examination was reported to be unremarkable except for a tender right knee.

A complete blood count (CBC) revealed a hemoglobin (Hgb) of 10.7 gm/dl, hematocrit (Hct) of 29.9%, and a white blood count (WBC) of 11,500/mm^3 with 63% neutrophils, 28% bands, 8% lymphocytes, and a normal platelet count. A chest x-ray, serum electrolytes, blood urea nitrogen (BUN), and glucose were normal. He was treated with oxygen and acetaminophen. Blood, urine, and throat cultures were obtained, and intravenous fluids were begun. He received one dose of ceftriaxone intravenously and was transferred to Sinai Hospital for admission.

On arrival he was alert—smiling and joking via an interpreter who came with him because of his deafness. His temperature was 39°C. His knee pain had resolved, and he was able to walk without difficulty. Shortly after admission, he received a second intravenous dose of ceftriaxone. Four hours after admission, his temperature was 36.9°C. Six hours after admission, he had an emesis episode and soiled his bed with loose stool. At 7.5 hours after admission, he again soiled his bed with stool and was placed in adult incontinent briefs at which time he became agitated and combative. After being given paper and pencil to write a message, he started to write but then threw his paper away. His actions were thought to be due to a communication problem because of his deafness. He was placed in soft restraints. Approximately 2 hours later, which was 10 hours after admission, he was found unresponsive. Resuscitation attempts were unsuccessful. All blood cultures drawn prior to antibiotic administration were reported the following morning to be positive for *Streptococcus pneumoniae.*

Postmortem examination revealed congestion and edema of the right upper lobe of the lung, thought to be compatible with an early bronchopneumonia. There were small pericardial and pleural effusions and a number of gallstones, but no evidence of biliary tract obstruction. The spleen weighed 7 grams and had multiple small infarcts. There was no evidence of meningitis.

Case 2. This young adult was diagnosed as having sickle cell anemia (Hb SS) at age 6 months. Between 2.5 and 17 years of age, he had seven episodes of chest syndrome (an x-ray with changes in the lung field). He was treated for pneumococcal meningitis at age 3, bilateral aseptic necrosis of the femoral heads at age 8, and staphylococcal osteomyelitis at age 11 years.

He had experienced multiple vaso-occlusive crises. At 3 years of age, penicillin prophylaxis was begun. At age 9, he received pneumococcal vaccine, and at age 14, he received Hib vaccine. He was seen regularly at the pediatric hematology clinic. At age 19, he was transferred to the adult medical service. Shortly thereafter, he stopped taking prophylactic penicillin.

At 21 years of age, he sought medical attention at a community hospital because of fever, headache, and shortness of breath. He was alert and was complaining of pain in his abdomen and hips. His Hgb was 9.0 gm/dl, WBC was 18,400/mm^3 with 42% neutrophils and 39% bands, and platelets were adequate on smear. A pulmonary infiltrate was seen on chest x-ray. He began to pass bloody urine and told his mother he was going to die. He developed increasing shortness of breath, had a cardiac arrest, and could not be resuscitated. Postmortem examination and premortem blood cultures drawn in the emergency room indicated that death was due to overwhelming infection with *S. pneumoniae*.

Case 3. This patient was diagnosed as having Hb SC disease at age 4 1/2. He did not receive prophylactic penicillin. At age 5 1/2 he was diagnosed as having meningitis and chest syndrome. *S. pneumoniae* grew from blood and spinal fluid. He was treated successfully and experienced full recovery. Polyvalent pneumococcal vaccine was given at age 11. He has been lost to follow-up.

Case 4. An 8-month-old female sibling of Case 3 arrived at the University of Maryland Pediatric Emergency Room dead on arrival. Autopsy findings and postmortem cultures indicated that death was due to *S. pneumoniae* meningitis. Blood for hemoglobin electrophoresis had been drawn at a well-baby clinic visit two weeks before demise. The results, unknown at the time of death, showed the infant had Hb SC disease. This child had been reported previously,[1] before the era of widespread newborn screening and prophylactic penicillin.

Discussion

It is presently well accepted that infants and young children with sickle cell anemia are at increased risk for developing severe bacterial infection, most frequently with *S. pneumoniae* or *H. influenzae*, type b. It is believed that the major reason for this susceptibility is the functional asplenia that occurs in these

children at a very early age. The conclusion from a multicenter study was that children should be screened in the neonatal period, and those with sickle cell anemia should receive prophylactic oral penicillin to decrease morbidity and mortality associated with pneumococcal septicemia.[2]

Although penicillin prophylaxis has become part of standard care for children with SS anemia during the first five years of life,[3] there is no general agreement as to the safe age for discontinuing penicillin. Zarkowsky et al,[4] using data collected from 23 clinical centers participating in the Cooperative Study of Sickle Cell Disease, calculated age-specific bacteremia incidence rates and concluded that the incidence rate was highest among children with Hb SS and Hb SC disease under 2 years of age. Children with SC disease had an abrupt decrease in the incidence rate after age 2, while those with Hb SS disease had a gradual decline in the incidence rate from 2 to 6 years of age.

The great majority of reports emphasize the young age of the children experiencing overwhelming infection. Of the 15 cases of pneumococcal infections in Hb SS patients reported by Barrett-Connor, only one was older than 5 years of age—an 11-year-old male with meningitis.[5] Similarly, the 16 children with meningitis reported by Robinson and Watson[6] included no child who had reached the sixth year of life. Griesemer et al,[1] however, noted in their report of 19 patients with a major sickle hemoglobinopathy and pneumococcal meningitis that 4 were older patients (ages 9, 12, 17, and 21).

Adults ranging in age from 18 to 34 years with major sickle hemoglobinopathies have developed pneumococcal sepsis and meningitis, frequently resulting in a fatal outcome.[1,7,9] A number of older children and adults with no underlying disease have developed severe infection many years after splenectomy following abdominal trauma,[10–12] indicating that age alone does not confer immunity.

Rogers et al,[13] in a recent publication, stated that "children with sickle cell hemoglobin C disease or sickle cell B^+ thalassemia may not be at greatly increased risk of septicemia." Their center, therefore, neither uses prophylactic penicillin nor treats these patients presumptively for occult bacteremia. A number of children with Hb SC disease, however, have been reported to have *S. pneumoniae* septicemia.[1,4,8,14–19] In addition to the two fatal cases in this report, other fatalities have been noted in the literature.[1,8,17]

Because of the young sickle cell patient's susceptibility to overwhelming bacterial infection, some centers have developed protocols that require immediate evaluation and treatment.[13,20] Such approaches often lead to hospitalization in order to administer the intravenous antibiotics necessary to maintain therapeutic blood levels in the child at risk. The great majority of children, however, have negative blood cultures. The cost of frequent hospitalizations and the availability of long-acting antibiotics providing excellent coverage against *H. influenzae*, type b and *S. pneumoniae* have prompted at least one group to propose outpatient management.[13]

Our present policy is to prescribe prophylactic penicillin to all patients with major sickle hemoglobinopathies, regardless of age, because older patients with Hb SS disease and those with Hb SC disease, although at lower risk than young children with Hb SS disease, still experience overwhelming infections. Management of suspected infection in children with sickle hemoglobinopathies, however, remains problematic. Physicians with experience in treating this disorder rely on the patient's age, height of fever, knowledge of the family, and clinical judgment to determine which patients are admitted to the hospital and which are treated as outpatients.

We believe that, at the present time, the number of children reported to have been successfully treated with outpatient protocols who are discovered to have bacteremia remains too small to make recommendations on management. Unfortunately, as so graphically demonstrated by Case 1, even children with mild Hb SC disease who are at an age when the incidence of sepsis is low, may experience a devastating outcome despite prompt antibiotic therapy.

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Commentary on infection in major hemoglobinopathies

The report by Freeman et al points up four unresolved questions in the treatment of children with hemoglobinopathies:

1. How can we get patients with sickle cell disease (sickle cell anemia [SS], sickle beta°-thalassemia, sickle beta⁺-thalassemia [S/beta⁺-thal], hemoglobin SC disease [SC], hemoglobin S-O_{arab} disease), diagnosed at birth in Maryland, into the health care system?
2. Which patients with sickle cell disease should be treated with prophylactic penicillin?
3. When should prophylaxis be stopped?
4. How should febrile episodes be managed in children with sickle cell disease?

My comments should be taken as those of an interested bystander. I am not a pediatrician, but I have watched the penicillin–prophylaxis story unfold, and I did participate in the development of a recent Department of Health and Human Services clinical practice guideline.[1] Free copies of this consensus document are available by calling 800-358-9295, but answers to the questions posed by Freeman et al will not be found there.

All parents of newborns in Maryland are offered a screening test for sickle cell disease at the same time that the newborns are screened for metabolic disorders. Repeat testing after high neonatal levels of fetal hemoglobin have decreased is required to confirm the diagnosis. Intensive efforts are made to get all patients whose results might indicate sickle cell disease into medical follow-up. That is far from easy.[2] It has required devoted effort by the staff of the Hemoglobinopathies Screening and Follow-up Program coordinated by the Maryland Department of Health and Mental Hygiene (DHMH). All children with sickle cell disease identified by the program are assisted in obtaining medical care. The patient described by Freeman et al in Case 4 died long before the program was established; since 1985 not one child entered into the program is known to have died. There is a very low documented incidence, less than 2%, of serious bacterial infections in the 463 patients with sickle cell disease followed by the program from birth to age 3. That record can only be continued with the active and enthusiastic participation of health professionals throughout the state. The paper by Freeman et al certainly makes one wonder what happens to the SC and S/beta⁺-thal children in other states who are not entered into programs like the one in Maryland, and are not necessarily given penicillin, and are not followed prospectively.

The guideline referred to above is silent on penicillin administration to S/beta⁺-thal and SC children because there is no consensus on the point. These conditions are milder disorders, splenic function continues longer than in sickle cell anemia or sickle beta°-thalassemia, and the risk of early mortality is lower. As Freeman et al point out, the risk is not zero.

In my own mind, the cumulative risk of administering pneumococcal vaccine and penicillin to all young SC and S/beta⁺-thal patients is smaller than the risk of overwhelming sepsis in a few of them; I have no argument with the authors on their recommendation. Some clinicians would restrict antibiotic prophylaxis to those children in whom splenic dysfunction can be demonstrated[3]; that is fine if your hospital laboratory can look for pocked red cells (a sign of a nonfunctioning spleen), but most cannot.

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Stopping prophylaxis is the subject of a current National Heart, Lung, and Blood Institute (NHLBI) study, PROPS II (Prophylaxis Penicillin Study II), that asks whether prophylaxis is beneficial after the age of 5, and whether continuing it interferes with immunity to pneumococcal infection or is associated with emergence of penicillin-resistant organisms. That study has another year to go before we get an answer; my own experience is that overwhelming sepsis in patients 17 years of age, as in the patient described in Case 2, is most unusual. I would probably stop the drug around age 7 if I knew that a booster of pneumococcal vaccine had actually been administered. As with all aspects of medicine, treatment must be individualized; although I would probably be more conservative with a child who had had as much trouble as the young man described in Case 2, I would have stopped treatment at age 19, as his physician did, even with the advantage of hindsight.

Treatment of acute febrile illness in children with sickle cell disease is controversial. Empiric use of ceftriaxone in a febrile SS child, with outpatient follow-up, is not unreasonable. It saves money, parents like it, and it has worked in the hands of experienced clinicians.[4,5] Ceftriaxone does not work as well as penicillin for pneumococcal infection, but the patient described in Case 1 could have been infected with *H. influenzae*, and he was not treated as an outpatient. Would knowledge that he had never received pneumococcal vaccine have made a difference in that choice? Maybe, but the real lesson to be learned from this patient is that a fever in any child with any form of sickle cell disease must be treated with great concern, and outpatient follow-up carries a definite, if small, risk.

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The role of ultrasound in prostate cancer detection in patients with an elevated prostate specific antigen level but no prostatic nodule.

Roger C. Sanders, M.D.

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ABSTRACT: *An increased level of prostate specific antigen (PSA) in the blood is a relatively sensitive indicator of prostate disease; a significant minority of men with increased PSA will have prostate carcinoma. A total of 736 men with a PSA elevation of greater than 4.2 without a rectally palpable prostate mass were evaluated with transrectal ultrasound at the Ultrasound Institute of Baltimore over a three-year period. Transrectal biopsy under ultrasound control was performed when a localized mass was seen on ultrasound or the prostate was small and the PSA level significantly elevated (93% of the series underwent biopsy). There was a positive biopsy yield for cancer of 38.5% in the cases biopsied. This high positive yield was achieved by combining high quality ultrasound with two to three samples from a visible mass and random samples from other sites.*

Prostate cancer is the most prevalent cancer in the world. It is the most frequently diagnosed cancer in men in the United States and the second most lethal. There are 135,000 new cases and 32,000 deaths each year in the United States from prostate cancer. Clinically evident cancer will develop in approximately 10% of the male population, and there is a 3% chance of dying from prostate cancer.[1] Early detection can be helpful in reducing mortality from prostate cancer. Approximately 80% of prostate cancers can be seen with transrectal ultrasound although about 20% do not cause a visual change at sonography.[2] Most prostate cancers (75%-80%) occur in the prostate's peripheral zone where the normal sonographic appearance is homogeneous. The remainder lie in the central or transitional zones, which have a varied sonographic texture so that cancers may not be distinguished from the benign prostatic hypertrophy that normally occurs in these areas. At the Ultrasound Institute of Baltimore, over 700 patients with an elevated

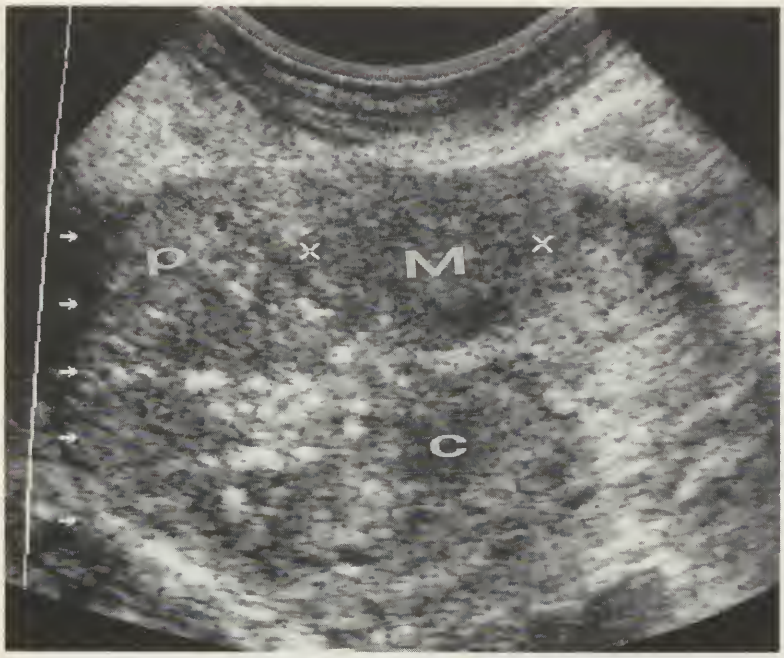


Figure 1. Transverse view of a transrectal sonogram in a patient with a carcinoma of the prostate. The prostate cancer is seen as an echopenic mass (M) in the peripheral zone (P). Note the inhomogeneous central area (C).

prostate specific antigen (PSA) level but without a mass on digital rectal examination have been referred in the last three years from urologists and internists. Sonographic and biopsy results with this large series will be discussed.

Materials and methods

Between November 1989 and July 1992, 736 men underwent transrectal ultrasound of the prostate because of an elevated PSA level without a rectally palpable mass. All patients underwent transrectal ultrasound examination with acoustic imaging 7.5 Mhz transrectal ultrasound probes. The results were interpreted at the time of the study, noting the presence of discrete or ill- defined hypoechoic masses in the peripheral zone (**Figure 1**). The following features of the masses were noted: (1) size; (2) location (masses at the base are more likely to involve the seminal vesicles, which make the lesion nonoperable); and (3) evidence of capsular invasion (capsules bulge or are irregular at an invasion site). The central and transitional zones were examined, and a few masses were noted in these less sonographically homogeneous areas.

Sonogram findings were discussed with the patient and family, and a mutual decision was made to perform a biopsy in 690 patients. Patients were premedicated with antibiotics on arrival—usually 250 mg or 500 mg of ciprofloxacin (unless contraindicated, when another antibiotic was substituted). This antibiotic has a peak blood level about two hours after administration. Antibiotic coverage was extended for 36–72 hours after the procedure. Initially, men were given 10 mg of Valium (diazepam) or 30 mg of Demerol (meperidine) for anxiety and rectal pain, but this regime was abandoned when it became clear it promoted hypotension. About 20 men with excessive pain sensitivity were given 500 mg/c of alfentanil intravenously prior to the biopsy. This drug renders the patient pain free for about 10 minutes. These patients were monitored with a pulse oximeter since there is small risk of hypoxemia.

Biopsies were obtained with an 18-gauge Biopty gun apparatus (manufactured by C.R. Bard, Inc., Bard Urological Division) attached to the endorectal probe. Six to 10 specimens were obtained in each patient, with an average of 8 specimens per patient. Specimens were sent in fixative to the pathology laboratory on the day of the biopsy. All patients were observed after the procedure for 20 to 45 minutes.

Five patients were hospitalized. Two patients had hypotensive episodes shortly following the procedure. A man with cardiac problems was hypotensive for about 30 minutes. He was released from the hospital the next day. A second patient had a severe hypotensive episode 45 minutes after leaving the institute but was released after overnight observation. These episodes occurred while we were still giving Demerol and Valium.

Three patients were admitted to the hospital with septicemia between four and seven days after the procedure; the septicemia responded rapidly to intravenous antibiotics. There were no episodes of bleeding requiring blood transfusion or hospital-

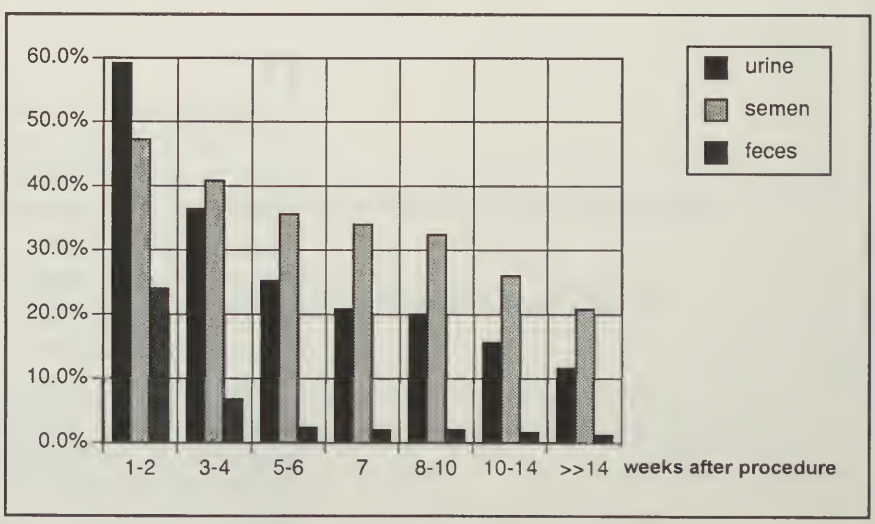


Figure 2. Bloodstaining, as reported by patients.

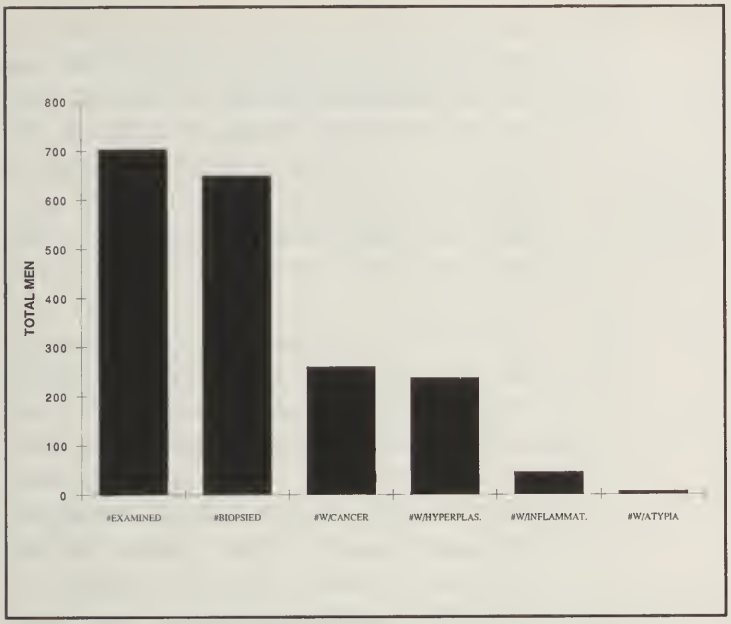


Figure 3. A total of 736 men were referred due to a PSA level greater than 4.2 but without a rectally palpable prostate mass.

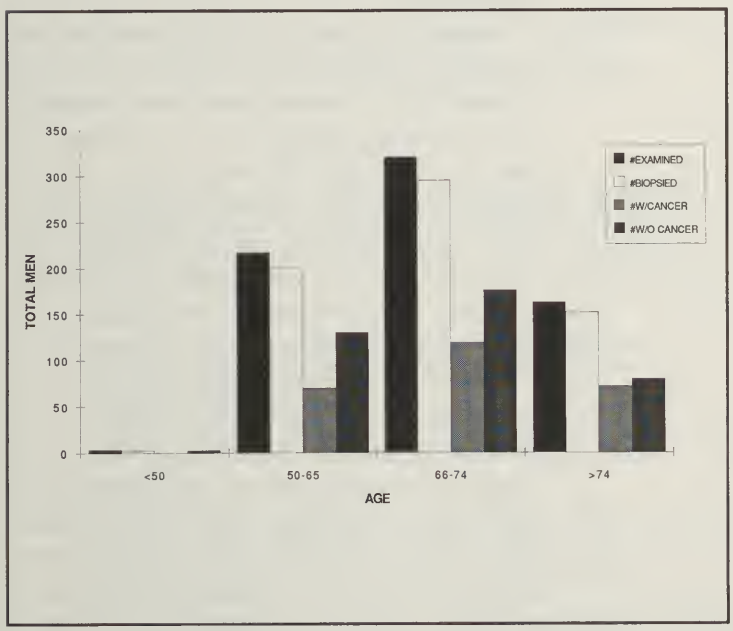


Figure 4. Biopsy results in men referred due to a PSA level greater than 4.2.

ization. A total of 270 patients were sent a questionnaire three weeks after the procedure to assess whether they had side effects. Sixty percent of the patients reported bloodstaining of the urine, which lasted longer than a week in 20%. Forty-seven percent reported some bloodstaining of the sperm, which persisted in 32% beyond a week. In all instances, the quantity of blood was small (**Figure 2**).

Results

A total of 736 men with an elevated PSA level greater than 4.2 but without a rectally palpable prostate mass were evaluated with transrectal ultrasound at the Ultrasound Institute of Baltimore over a three-year period. There was a positive biopsy yield for cancer in 270 patients (37%) or 39% of the cases biopsied, (**Figure 3**). Of those patients biopsied, 216 were 40–65 years of age, 339 were 66–74, and 135 were over 74 (**Figure 4**).

Cancer detection rates were similar in those 50–65 and 66–75 years of age, but greater in the over 75 years of age group. As expected, the positive biopsy rate increased as the PSA and PSA density (PSAD) levels increased (**Figures 5 and 6**). With a PSA level of 15 or more, most patients had cancer. All patients with a PSA level greater than 25 had cancer or recent acute prostatitis. All but two patients with a PSAD level greater than .4 had cancer (**Figure 6**). Most patients with visible masses but negative biopsies had foci of benign prostatic hyperplasia (BPH) in the peripheral zone (254). Twenty-three had prostatitis and five had prostate intraepithelial neoplasia (PIN). As expected, there was a correlation between the PSA level and cancer. At all PSA levels above 4.2, the chance of cancer was greater than one in five (**Figure 5**).

The prostate size can be related to the PSA level by the formula: PSA divided by the volume of the prostate. This formula gives a value known as the PSAD. Volume can be estimated with transrectal ultrasound (TRUS), using the formula for a prolate ellipse. The length, width, and height of the prostate are multiplied together, and the sum is divided in half. PSAD estimation was helpful in deciding whether a biopsy should be performed (**Figure 6**). If the PSAD was less than .15 and no focal lesion was identified, a biopsy was not performed. All specimens were given a Gleason grade at pathology. The Gleason grade is a pathological method of grading the severity of the cancer based on the appearance of the cells and the extent of the tumor. Most were Gleason grades of 5, 6, or 7.

Discussion

Almost all men with early prostate cancer have no symptoms. Frequent voiding or poor stream do not relate to prostate cancer but to benign prostatic hypertrophy (BPH). Seventy-five to eighty percent of prostate cancers occur in the periphery of the gland away from the peri-urethral area where benign gland hypertrophy causes urinary symptoms.

The level of PSA, a glycoprotein produced only by the prostate, was the determinate used for a number of years in patients with prostate cancer to see if cancer had recurred. It has recently been realized that PSA elevation can be used as a tool for detecting cancer before it is metastatic.[1] Most agree that screening with PSA estimation should begin at age 50 since prostate cancer incidence rises after that age. Among our patients, 27.5% were between ages 50 and 75. PSA estimation at an earlier age may be desirable in those with a family history

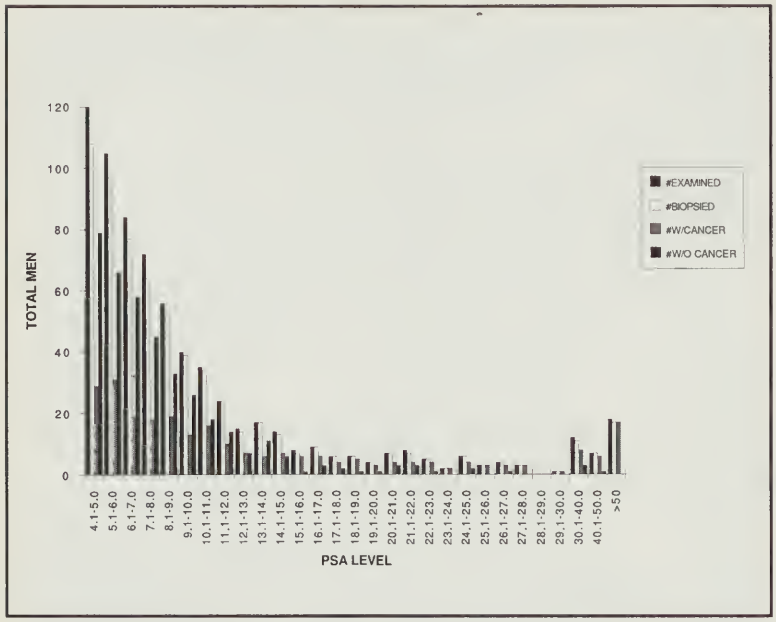


Figure 5. PSA level vs biopsy results in men referred for increased PSA.

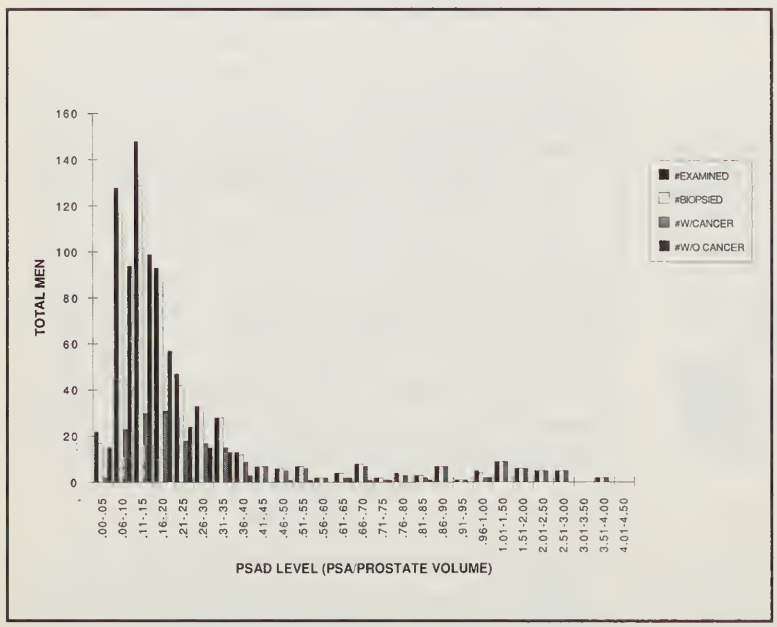


Figure 6. PSAD level vs biopsy results in men referred for increased PSA.

of prostate cancer, in African Americans, and in men with hematospermia.

PSA elevation is not specific for cancer. Other prostate abnormalities that increase the PSA level include BPH, acute and chronic prostatitis, PIN, and digital palpation. BPH is thought to increase PSA by only 0.3 ng/ml per gram of prostate tissue. A value of less than 4.0 ng/ml is often considered the top of the normal range, 4–10 is indeterminate, and greater than 10 is associated with a high likelihood of cancer.

Patients in this series all had a PSA level greater than 4.2 ng/ml. We related the PSA level to the volume of the prostate, deriving the PSAD.[4] We used the PSAD as a guide to determine whether to biopsy if no focal lesion was seen with ultrasound. Initially, a value of .25 was used as the cutoff rate for biopsy in the absence of a focal mass, but with time and the minimal complication rate, we lowered the biopsy threshold in the absence of a focal mass to .15 and later to .10. The cancer rate rose from 35% to 39% when we made this change.

In our view, ultrasound is an essential management component when an increased PSA level is discovered. Only a minority of patients with cancer have a digitally palpable mass.[2] Some patients with increased prostate size, a relatively low PSA level (below 10), and no visible mass on ultrasound may not require biopsy if the PSAD is below .10. The yield with ultrasound- guided biopsy is higher than with digitally guided biopsy.[5] Suspect masses can be targeted easily, and random biopsies of other sites can be located accurately so that all prostate regions are biopsied.

Hypoechoic lesions in the peripheral zone are considered highly likely to be cancer, but may represent BPH.[2] Our study shows that one-third of these hypoechoic areas are cancer. Features that raise the likelihood of cancer include: irregular borders, capsule bulging, and fat disruption around the prostate. Central zone lesions are more difficult to recognize due to inhomogeneous BPH tissue in most men over 50 years of age. Some lesions start in the peripheral zone and extend into the central zone.

Approximately 80% of the positive biopsies came from suspicious areas identified by ultrasound, but others were obtained from areas with a sonographically normal appearance. Sixty percent of the ultrasonically suspicious areas did not contain cancer. We analyzed the negative mass biopsies; most were related to foci of benign prostatic hypertrophy occurring in the peripheral zone (254), a moderate number were due to prostatitis (23), and a very few to PIN (5). A few had normal glandular tissue.

Several practical problems exist in the management of an increased PSA level. What level of PSA is always cancer? In our experience, anyone with a PSA level over 25 who had not had an acute prostatitis episode had cancer.

Can one predict cancers that are incidental and that will grow so slowly they can be considered an incidental finding? Gleason- grade estimations of the cancer aggressiveness based on cell shape and tumor extent are helpful in predicting tumor aggression. The range is from 3 (very low aggression) to 9 (very high aggression). Most cancers fall in the middle range when treatment is probably worthwhile.

In patients over 75 years of age, it is helpful to look at the number of positive biopsy specimens and at the Gleason grade. If only one of the six to nine specimens is positive, a re-biopsy of the area where the cancer was found may be worthwhile to see how widespread the tumor is.

We believe these results represent the largest series of patients with increased PSA levels without palpable mass examined with transrectal ultrasound with, if necessary, biopsy. The 37% positive biopsy rate is greater than any other comparable series in the literature so far as we know. Other investigations have looked at patients from screening studies who have undergone PSA estimation, digital rectal examination, and TRUS and have reported on much smaller numbers.[6-7]

Patients in our series were referred from both urologists and internists in a 70%/30% ratio so that the quality of the rectal examination was variable. The positive biopsy rate in the two groups, however, was almost identical. Since there is such a large positive rate without a rectally palpable lesion, we believe that as soon as an elevated PSA level has been discovered and a rectal examination is negative, a TRUS with biopsy should be performed if a mass is found on ultrasound or the PSAD is elevated above .10. A digital rectal exam remains an important part of screening for prostate cancer since about 16% of cancers are palpable and yet have a normal PSA level.

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Hypokalemia associated with ticarcillin–clavulanic acid

Rudolf Titanji, M.D., and Andrew Trofa M.D.

ABSTRACT: *Charts of 16 patients on ticarcillin-clavulanic acid were examined. Eight patients were found to have hypokalemia, yet not all were screened routinely for potassium imbalance. Some physicians prescribing ticarcillin-clavulanic acid seem unaware of the drug's side effect.*

From St. Agnes Hospital, where Dr. Titanji was a resident and Dr. Trofa was assistant residency program director and infectious disease specialist at the time of the study.

Ticarcillin–clavulanic acid (Timentin) and other penicillins can cause hypokalemia by behaving as nonreabsorbable anions in the distal tubules causing an increase in urinary excretion of potassium. In some patients, the hypokalemia can result in cardiac arrhythmias. We, therefore, undertook the following study to find out the extent of hypokalemia associated with ticarcillin–clavulanic acid in the Medical Service of St. Agnes Hospital in Baltimore.

Patients and methods

The study was carried out from January to June of 1990. Computer printouts of patients on ticarcillin–clavulanic acid were obtained twice a week from the Pharmacy Department. The charts of these patients were subsequently reviewed. Excluded from the study were patients on potassium supplements prior to initiation of treatment and patients with disorders that could affect potassium balance (e.g., diarrhea, renal failure, or treatment with diuretics). Laboratory parameters studied included serum sodium, blood urea nitrogen (BUN), and creatinine levels. Normal potassium levels in our laboratory were 3.5–5.6 mEq/L.

Results

Sixteen charts were reviewed. **Table 1** shows the eight patients found to have hypokalemia. Five patients had hypokalemia on the second day of treatment and two on the third day. All the patients found to have hypokalemia were given potassium supplements by residents or attending physicians.

Table 1. Potassium levels

	Days of treatment						
Patient	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
#1	4.1	-	3.9	3.2	3.5	-	4.1
#2	3.9	2.4	4.1	3.8	5.2	-	-
#3	3.8	4.2	2.4	2.5	2.6	3.1	3.3
#4	5.1	-	3.1	-	3.5	-	-
#5	4.3	3.2	5.0	-	4.2	-	-
#6	4.7	2.6	4.0	5.2	-	-	-
#7	3.6	3.0	-	2.4	-	3.1	4.0
#8	5.7	2.9	4.3	4.6	-	-	-

Frequently, we did not find any physician documentation on the charts stating that the hypokalemia may have been caused by ticarcillin-clavulanic acid. We found that not all patients on ticarcillin-clavulanic acid were routinely screened for potassium imbalance. There were no significant changes in the serum sodium, BUN, or creatinine levels.

Discussion

This study, along with others,[1-3] shows that ticarcillin-clavulanic acid can cause hypokalemia. This generally occurs on the second and third days of therapy. Apparently, most physicians prescribing the drug are unaware of this side effect.

Due to the small number of patients examined, this study may not accurately reflect the extent of hypokalemia encountered during therapy with ticarcillin–clavulanic acid, but it serves as a reminder to physicians to routinely check serum potassium levels in patients on ticarcillin–clavulanic acid.

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Vignette of medical history: Porphyria in royalty

Joseph M. Miller, M.D.

Dr. Miller is a retired surgeon from Timonium, Maryland.

ABSTRACT: *The porphyrias are a group of uncommon inherited disorders caused by an accumulation of porphyrins in the body. This paper identifies many of the individuals in the royal houses of Stuart, Hanover, and Prussia who were afflicted with this condition, and highlights the impact this disease had on the history of England.*

Historians have often been thought to underestimate the impact of disease on history, but in many instances, a direct cause and effect state may be defined. Illness is not always the reason for change, but porphyria certainly influenced events in England and other parts of Europe.

Students of the American past will recall the description of George III of Great Britain as given in the Declaration of Independence. He was regarded as an absolute tyrant and was considered responsible for many of the ills affecting the colonies.

George was also considered "mad" during several periods of his reign, and the question of his sanity during the American Revolution has been raised. At one time, he was thought to have a manic-depressive personality, but investigative studies have produced a more reasonable and acceptable diagnosis of porphyria.[1] Further wide-ranging familial studies eventually led back to Mary Queen of Scots. [2]

The porphyrias are a group of uncommon inherited disorders caused by an accumulation of porphyrins in the body.[3] Disease transfer to progeny is by means of an autosomal dominant gene controlling porphobilinogen deaminase formation. Symptomatic and asymptomatic heterozygotes for the defect have a 50% deficiency of the enzyme. Curiously and still unexplained is that about 90% of those with documented deficiency of this enzyme remain asymptomatic throughout their lifetimes.

Individuals with latent or expressed disease may have an acute attack precipitated by any number of factors. Symptoms occur more frequently in females than in males. The disease is rare before puberty, and incidence and

severity decrease after menopause. In addition, clinical manifestations are more evident during menstruation. A great number of drugs, including the barbiturates, sulfonamide derivatives, and synthetic estrogens, may precipitate the ailment's return.

The clinical course is marked by intermittent episodes of abdominal pain and spells of psychiatric turmoil. A painful paresis of the arms and legs, visual disturbances, radicular pain, and dysfunction of the autonomic nervous system may be seen. Increased amounts of delta aminolevulinic acid and porphobilinogen (PBG) are excreted in the urine. The port wine color sometimes seen in the urine is a reflection of PBG conversion.

George III, the most well-known individual with the syndrome, had his reign punctuated by five episodes of mental illness. Some biographers thought he was courageous and steadfast, although his drive to be a potentate and exert supreme personal rule led to major political changes in Great Britain. He was plain, sound, and sincere but had little rapport with the artistic world. Religious, moral, and temperate, he and his wife led an exemplary life. His reign was the second longest in English history, although much of the time he was considered insane or on the borderline and, overall, not too bright.

The loss of the American colonial empire was a great blow to England, but King George was not in one of his mad spells when the event occurred. His last years were difficult for him and his subjects. He became blind from cataracts and later, deaf. In the years between 1788 and 1810, the king was apt to be ill at any time. His conduct was most unusual, and his doctors decided that George needed to be incarcerated for the protection of himself and others. He was subjected to a wide variety of nonspecific treatments without beneficial results.

Fifteen individuals with porphyria have been discovered in the royal houses of Stuart, Hanover, and Prussia (**Figure 1**). The more famous included Mary Queen of Scots, James I, Queen Anne, George III, and Frederick the Great. Two other afflicted people whose lineage could be traced to these royal houses have been identified in more recent times.

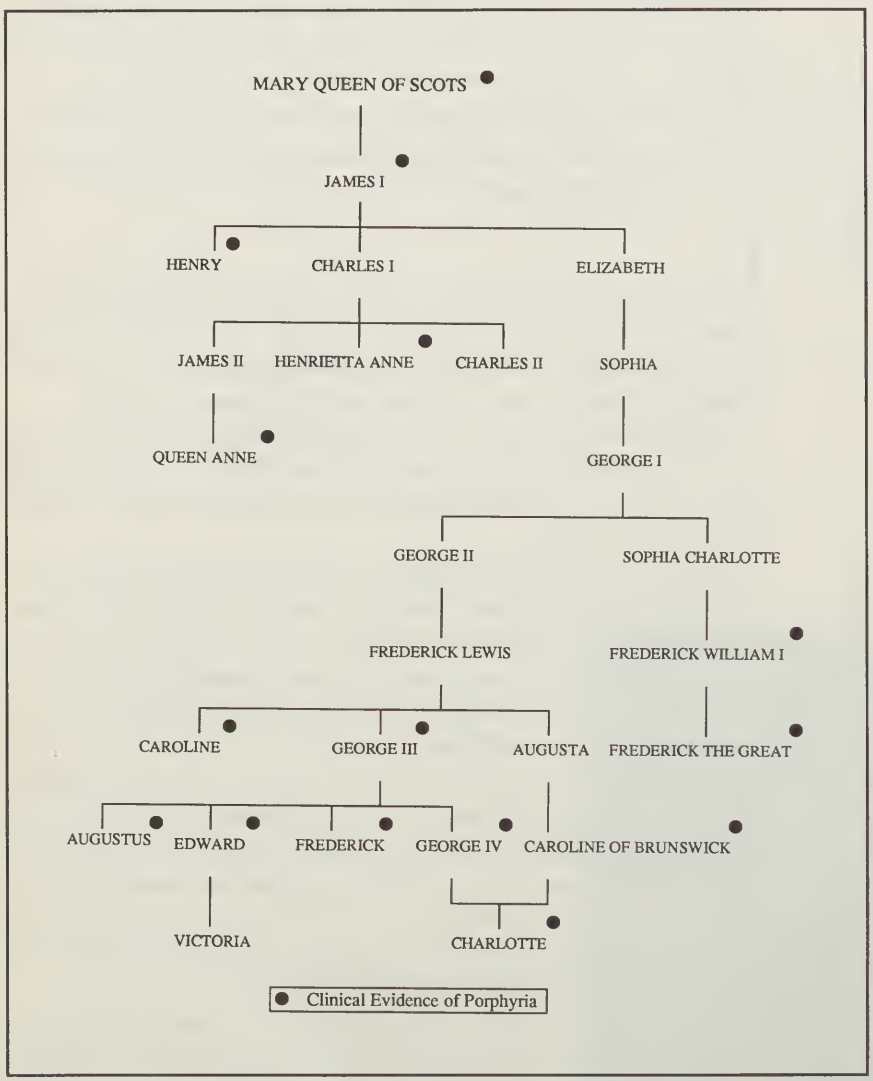


Figure 1. Members of the royal families exhibiting clinical evidence of porphyria.

Mary Queen of Scots, one of the great invalids of history, suffered repeated attacks of abdominal pain, vomiting, and mental disturbances. Often confined to bed by these episodes, she became melancholy, excitable, and distracted. Her political behavior was such that she was forced to abdicate and flee to England where Queen Elizabeth kept her as a guest and prisoner for 17 years. Convicted of treason, Mary was subsequently executed by Elizabeth.

James I, the son of Mary, succeeded to the throne of Great Britain after the death of Elizabeth. He, too, had repeated attacks of porphyria. Fits of unconsciousness were accompanied by passage of bloody urine. His last illness terminated in convulsions and death.

Queen Anne, who succeeded to the throne in 1702 upon the death of William III, married Prince George of Denmark in 1683. Besides having innumerable miscarriages, Anne carried 17 children to term, but they all died quickly except a son who succumbed at 11 of a fever or smallpox.

Frederick the Great—the monarch on crutches—also suffered from porphyria. He inherited the disease from his father, Frederick William I, whose parents were first cousins and descendants of Sophia in the Hanover line. Frederick the Great had

repeated attacks of difficulty with his stomach, vomiting, colic, and constipation. At 35, he had his worst episode with a partial apoplexy.

Many times porphyria produced dramatic and unusual events in this group of royal individuals.[4,5] It mimicked poisoning on five occasions: Mary Queen of Scots in 1566; the Prince of Wales in 1612; James I in 1625; Henrietta Anne in 1670; and Caroline in 1775. Queen Anne had repeated unsuccessful pregnancies and so did not produce an heir to the throne, perhaps as a result of porphyria. This sequence of events led to the accession of the Hanovers. In the reign of George III, porphyria occasioned the regency crisis of 1788 and the eventual advent of Victoria to the throne. She became the successor because of the death of Charlotte, heiress presumptive, just after the delivery of a stillborn child as a result of the royal illness.

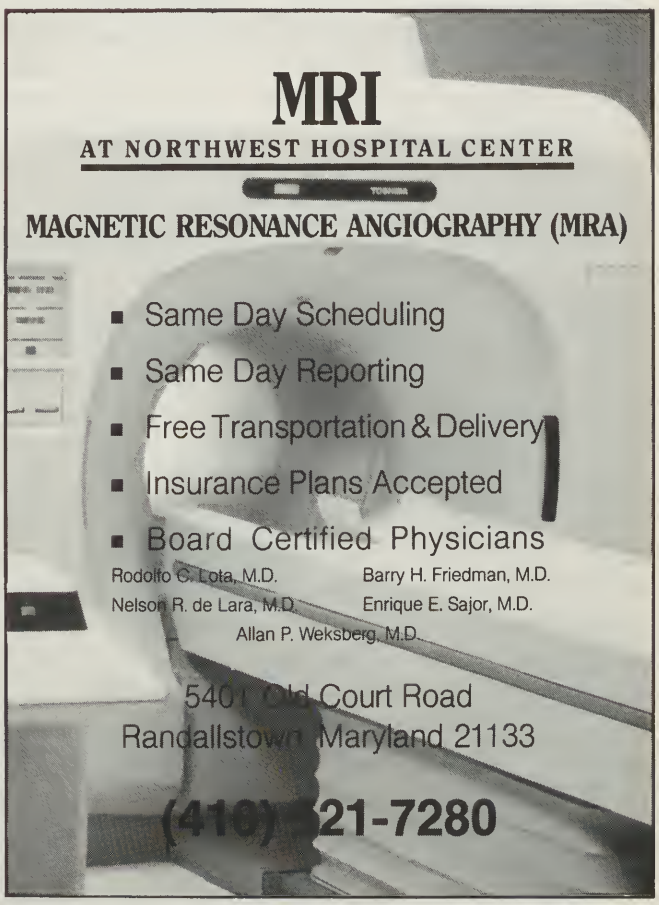
Only a few members of the royal society have had overt porphyria, and the numerous carriers will never be known as 90% would have been silent partners. One individual who did show the disorder was the father of Queen Victoria. She inherited the gene for hemophilia from her mother, and this in turn was passed on to members of succeeding generations. The intriguing question arises as to whether Victoria also received the porphyria gene from her father. If she did, its spread into the German house of Hohenzollern and to her grandson, William II, would have been possible.

As is evidenced by the above, disease can have a significant impact on history. Porphyria certainly had an effect on English history for centuries.

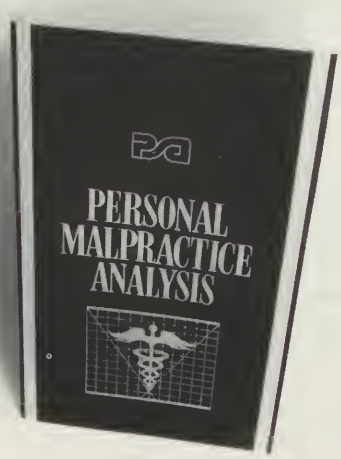
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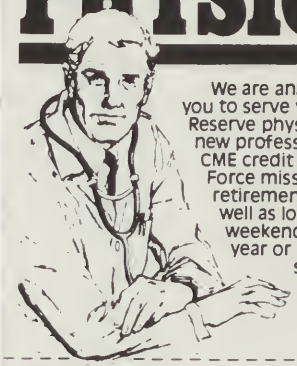
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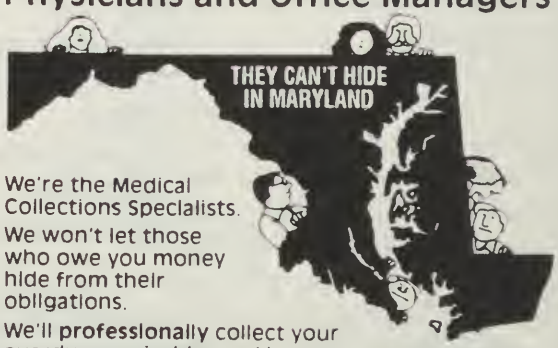
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WORD ROUNDS

Quatrains

The Latin word for "four" is *quattuor.* From it we derive our prescriptive *quater in die* 'four times a day' or **QID**. The **quadriceps** femoris muscle—that great friend of the professional punter—is named for its four heads (*quadri* 'four' + ceps from Latin *caput* 'head'). Of course, the **biceps** muscle has two, and the **triceps** has three heads. The word **muscle** stems from the illusion produced by contractions. To some early Romans, the ripples appeared to resemble a small mouse racing beneath the skin. (Latin *mus* 'mouse'—*musculus* 'little mouse'. The genitive "of mice" is *murinus*, which gives us the term **murine.**)

Quadriplegia (Greek *plege* 'a stroke or paralysis') and **quadripara** (Latin *parere* 'to bring forth or deliver') are self-explanatory. Unfortunately, **quadrigeminy** is flawed. It describes a cardiac arrhythmia in which every fourth beat is early, usually a premature ventricular beat. However, **geminus** itself means "occurring in pairs or couples" and derives from Latin *gemini* 'twins'. **Bigeminal** rhythm (in which a pair of beats is followed by a pause, then another pair, then a pause, etc.) is obviously redundant since **bigeminy** actually means "**two** twins" or two pairs. (Latin *bi* 'two'). **Trigeminy** (three pairs) and **quadrigeminy** (four pairs) are, therefore, also misnomers—however, such is the adversity of life and the misfortune of malapropism.

(In astronomy, the constellation **Gemini** can be found in the southern sky above and to the left of Orion, easily seen during the winter and spring months. The two brightest stars are Castor and Pollux, the mythologic **twins** for whom the constellation is named.)

(**Malapropism,** incidentally, derives from a leading role in the 1775 play *The Rivals* by English playwright Richard Brinsley Sheridan. The character's name was **Mrs. Malaprop,** and she exulted in murdering the King's English, confusing near homonyms as in "I was so hungry I nearly gouged myself to death." Her catchy name comes from the French expression *mal a propos* 'inopportune'. Sheridan is probably best known for his comedy *The School for Scandal.*)

Quartan malaria, caused by *Plasmodium malariae,* is characterized by fever that recurs every four days, the result of the protozoa dividing within the red cell, rupturing the cell membrane, and releasing scores of **merozoites** (Greek *meros* 'part' + *zoion* 'animal'—part of an animal—the offspring of asexual plasmodial reproduction). **Malaria** derives from Italian *mala* 'bad' + *aria* 'air'. It refers to the primitive belief that the putrid, miasmic vapor rising from swamps caused this febrile illness. The ancients were actually very close to the truth—barely missing the true vector, *Anopheles,* whose nuptial bed was sheltered within those swamps. (***Anopheles*** from Greek *an* 'without' + *ophelos* 'use'—that is, useless, or more properly, harmful.

Typhus, a group of disorders caused by rickettsial organisms, has a similar etymology—from the Greek *typhos* 'smoke, clouds, or vapor'—a reference to its etiology, which was equally obscure to early physicians. There are three forms of typhus. **Epidemic typhus** is caused

by *Rickettsia prowazekii* and transmitted by the human louse, *Pediculus humanus.* **Endemic typhus,** caused by *Rickettsia typhi,* is carried by rodents (thus **murine typhus**) and transmitted by their fleas. The third form of typhus is known as **benign typhus,** also called **Brill-Zinsser disease.**

All rickettsial organisms owe their identity to Howard Taylor **Ricketts,** an American pathologist who discovered the organism responsible for **Rocky Mountain spotted fever** *(Rickettsia rickettsii*). Subsequently, Ricketts went to Mexico to investigate a disease known there as **tabardillo,** which ultimately proved to be **endemic** or **murine typhus.** Unfortunately, Dr. Ricketts contracted the disease and died in 1910 at the age of 39.

Stanislas Joseph Matthias von **Prowazek** was a German zoologist. He became interested in those same tiny pleomorphic rods and, in 1913, traveled to Constantinople to study a typhus epidemic. There he convincingly validated Howard Ricketts' observations. Unfortunately, Von Prowazek also succumbed to the deadly organism and died in 1915. He, too, was 39 years old. Both men have been immortalized by the taxonomists.

Benign typhus is actually a recrudescence of epidemic typhus in patients who have become partially immune. The infection may remain latent for as long as 70 years after the initial illness. It was first described in 1910 by Nathan **Brill,** professor of clinical medicine at Columbia University, and confirmed by Hans **Zinnser,** who was professor of bacteriology at that institution. Brill was also noted for describing the clinical and pathological features of **Gaucher** disease and for first suggesting splenectomy as a treatment for idiopathic thrombocytopenic purpura. Zinnser, preeminent in bacteriology for decades, also wrote the biomedical classic *Rats, Lice, and History.* (Philippe Charles Ernest **Gaucher** was a French dermatologist who, in 1882, first described the disease that bears his name. Today, it is a recognized lipid storage disorder caused by a genetic deficiency of glucocerebrosides.)

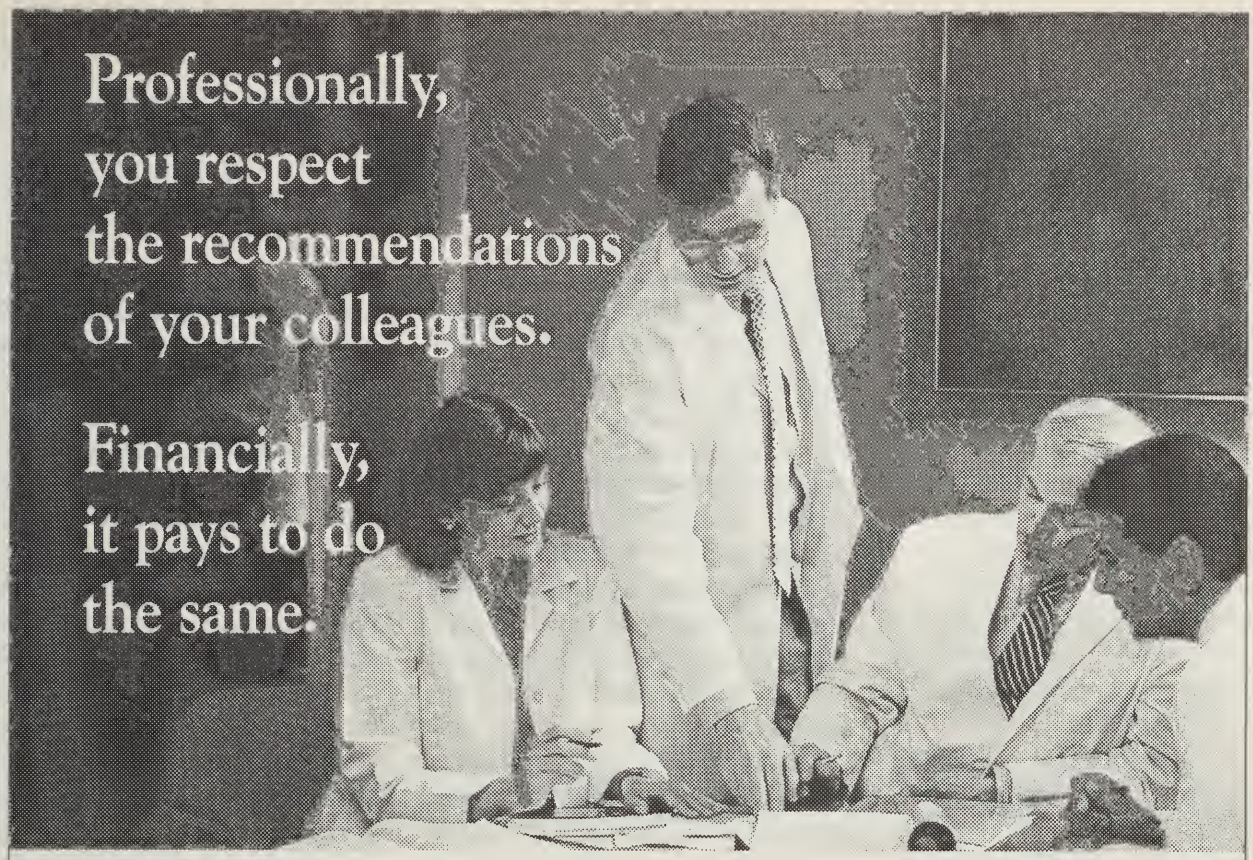
The rickettsioses embrace a number of other well-known disorders, including Rocky Mountain spotted fever, boutonneuse fever, rickettsialpox, scrub typhus, and Q fever. **Boutonneuse fever,** known by our French cousins as *Fievre Boutonneuse,* is a disease similar to Rocky Mountain spotted fever although much milder, occurring in most Mediterranean countries, Africa, and the Middle East. It is heralded by a primary skin lesion—a black spot found at the site of the tick bite known as the *tache noir.* The resemblance to a small button hole (French *boutonniere*) endows the illness with its name.

Scrub typhus is also known as **tsutsugamushi** fever from the Japanese *tsutsuga* 'harmful or dangerous' + *mushi* 'insect'—a reference to the *Trombiculidae* (mites that transmit the disease).

Q fever, caused by *Coxiella burnetii,* is an unusual rickettsial infection in that it is not spread by the bite of arthropods. Instead, dried tick feces are inhaled with dust or ingested in milk. The disease puzzled microbiologists and epidemiologists for years, and thus became known as the **query disease,** shortened to **Q fever.** The organism itself is named after American bacteriologist Herald Rea **Cox,** and Nobel laureate Frank MacFarlane **Burnet,** who isolated the organism in 1937. (Burnet, an Australian virologist, shared the 1960 Nobel prize for physiology or medicine with British zoologist Peter Medawar for discovering that animal embryos can develop immunological tolerance to administered antigens—leading the way to transplant procedures.)

The number "four," *quattuor* in Latin, becomes *tettares* in Greek, from which we derive the combining form **tetra.** In 1948, an antimicrobial substance was obtained from several species of the soil bacteria *Streptomyces.* Chemically, it consists of a four-ring structure, and, clinically, it is lethal to the rickettsiae. Today, it remains the treatment drug of choice for most rickettsioses.

It is called **tetracycline.** ■



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Book Reviews

Mercy or Murder? Euthanasia, Morality and Public Policy. *Kenneth R. Overberg (ed.) Kansas City: Sheed and Ward. 1993. 278 pages. $15.95*

Moses called all Israel and delivered to them the statutes engraved in stone. One of the commandments was: "Thou shalt not kill." Recent headlines seem to indicate that deviation from this ukase may be permissible in certain situations, although it is not a universally accepted decision. The rising intensity of emotional feeling about this obviously controversial subject persuaded Overberg to gather the best contemporaneous thoughts—pro and con—and permit the reader to form an individual judgment.

Two types of euthanasia (the good death) may be distinguished: active or physician-assisted and passive or letting die. At times, only a nebulous boundary separates these forms. This concept is not new, as magistrates in ancient Athens kept a supply of poison for those people wishing a quick death. During the rise of Christianity, however, such activity was denounced as a violation of the will of God. At a much later time, the Euthanasia Society of America was founded with the belief that permitting incurable patients to terminate their existence was merciful and logical. Members summarized their feelings by: "It is not how long we humans live, but how we live that is important."

A despicable form of euthanasia appeared in Germany in the 1920s and 1930s when physicians, with government stimulation and acquiescence, terminated "useless lives." This practice moved from homicide to genocide with the advent of the Holocaust, as the world witnessed the dramatic change from killing incompetent people to murdering persons of different races and thought.

A statement adopted by the American Medical Association (AMA) in 1973 states that the intentional termination of one human being by another—mercy killing—is contrary to the ethics of the medical profession and the policy of the AMA. Cessation of extraordinary means of prolonging life when irrefutable evidence that biologic death is imminent must be a decision of the patient and relatives joined with the advice and judgment of the physician.

In contrast, the Royal Dutch Society for the Promotion of Medicine has advocated euthanasia as a permissible medical practice. The Dutch have dispersed with the terms "active" and "passive." The society also has openly defended physicians accused of homicide by practicing euthanasia. Although the act is a crime in the Netherlands, it is common and open. Estimates suggest that 5,000–8,000 Dutch lives are terminated in this manner each year.

The concept smoldered in the United States until 1991 when the state of Washington almost legalized physician-assisted killing with Initiative 119. Later, the federal Patient Self-Determination Act became effective. Every health care facility receiving Medicaid or Medicare funding was required to inform such patients of their right to decline unwanted treatment, including that which would potentially prolong life.

The Vatican, through the Sacred Congregation for the Doctrine of the Faith, has defined euthanasia as an action or omission that, of itself or by intention, causes death, in order that all suffering in this way may be terminated. Euthanasia, as such, is forbidden, although the use of medication and other treatment to alleviate suffering is encouraged. Considerable difficulty arises when the question of discontinuing nutrition and hydration to a dying patient is encountered. The Vatican does not provide an absolute answer.

Because federal law states that patients have a right not to undergo prescribed treatment, they have the option to live or die. Euthanasia advocates suggest that a patient should be permitted and assisted, if necessary, to exercise this prerogative. The troublesome question may arise: Is the patient with an incapacitating, life-threatening disorder that is pursuing a chronic course, tired of living, or are the relatives and doctors tired of the patient?

The decision for euthanasia or for life as long as it may exist may become nettlesome. This collection of short essays will provide the reader with pertinent material to make a more informed decision. Many of the essayists refer to identical legal actions, declarations, and events and justify their stance according to a personal interpretation. Discussions in this easily read book are crystal clear. Both sides have been granted equal space so that the reader may make an unbiased choice.

As with other difficult-to-resolve societal problems, a stand on euthanasia is easily assumed when encountering unrelated third parties with terminal disease. At the moment, cost containment in health care is the cynosure. Because tremendous sums are spent in giving terminal care to dying elderly patients, euthanasia may be encouraged in such an area. The public, physicians, and clergy must be on guard to prevent such a reaction. If a plan for mercy killing must exist, then the law must rigidly define its parameters. The decision to grasp euthanasia must be a choice of a competent patient after a full discussion with relatives and in agreement with doctors and clergy. Incompetent or brain-dead patients must have decisions made by proxy.

For relatives confronted with the severe suffering of a dying patient, the book is invaluable. As physicians and clergy become involved in judgment, they, too, may gain from this book. In addition, the earlier medical students are introduced to the subject, the easier they may make later choices.

The book should be available in all medical and public libraries. Each chapter is followed by topics for reflection and discussion. Medical cases are presented at the end of the book for judgment by the reader to encourage individual opinion. A list of source material and a good glossary are further credits. The only thing lacking is an index. Overall, the book is a welcome addition to the medical armamentarium as a help in a troublesome situation.

JOSEPH M. MILLER, M.D.
Timonium, Maryland

■ ■ ■

Inside the Temple. The High Cost of Mistaking Medicine for Religion.
James Stacey. Winnetka, IL: Conversation Press, Inc. 1993. 193 pages.
$12.95

With deft sure strokes, James Stacey addresses and analyzes a difficult economic problem facing the new federal administration. Reduction of the large sums being spent for medical care, which at present are not adequate for all citizens, requires keen thought and skill.

Repeated attempts to provide such management have been made since the 1930s. Any number of alphabet agencies aimed at giving proper therapy to rich and poor alike have been devised. This era, inaugurated by the advent of the antibacterial compounds, was extended by numerous highly technologic forms of diagnosis and therapy. Each innovation witnessed a rise in expenditures by the federal government (**Table 1**).

Table 1. Federal expenditures for medical care

Year	Amount
1970	$ 10.5 billion
1975	24.2 billion
1980	51.4 billion
1990	148.0 billion
1993	211.0 (projected)

At the present time, the working poor and a substantial number of middle class families would face tremendous financial difficulties if they had to be hospitalized for any period of time. In the 1930s, the cost of hospital care was $4–$5 per day. Room, board, and ancillary services approached a national average of $400 in 1982 and $700 in 1987. Individual practices and financial rewards grew tremendously. Medical schools also experienced a period of boom with the acceptance of a greater number of students.

Because newly graduated doctors wanted to specialize, they eagerly sought residencies and then fellowships. Medicine then became less of an art and more of a science. Although medical practice later lost its lure for many, societal and federal expenditures, nevertheless, increased dramatically. Hemodialysis, programs to decrease infant mortality, heart–lung machines, coronary bypass procedures, and improved methods of imaging became commonplace in medical practice and added their share to the costs of medical care.

At a time when adjuvants to medicine offered opportunities for marvelous care, many citizens simply could not afford them. In the last part of the 1980s, only

40% of the eligible poor were covered by Medicaid, and more than 37 million people found themselves without health insurance or with critically less than adequate means of protection.

Doctors feared that government and corporations adopting their methods would soon control the practice of medicine. Further disquiet became apparent with the realization that professional liability insurance had become too costly, troublesome, and unpredictable.

Because costs seem to be the linchpin of this complex problem, the total amount spent had to be reduced. The methods suggested to effect this result, although efficacious, will not be pleasing to all concerned:

1. When patients paid for part of their care out of their own pockets, the use of outpatient and hospital facilities dropped 20%.
2. Cost-sharing and deductible limits should be related to income.
3. Ambulatory care centers, since they are less expensive, should be used in preference to hospital emergency rooms.
4. Certain cancers have a notoriously poor prognosis, and perhaps patients with these tumors should not be subjected to surgery or chemotherapy.
5. Much of the terminal care provided in hospitals may be given at home or in a hospice.
6. Cutbacks may be made in hemodialysis and coronary bypass procedures. (Patients with kidney failure have frequent complications to make their lot most unhappy. A study in 1980 suggested that as many as 50% of the operations for coronary bypass might not have been necessary.)
7. At the moment, further high cost equipment should not be installed in hospitals. In addition, some reduction in services and staff seem warranted.

All practitioners, no matter what their specialty, should read this book, and, in reality, they cannot afford to miss it. Many contemporary doctors, although complaining about the paperwork associated with modern medicine, do not have a sharp image of what really has happened in the economic field. Legislators—federal, state, and municipal—will find the volume educational. One hopes, that in combination, they will grasp the significant details and plot a course to ablate the effects of this malignant economic virus affecting society.

JOSEPH M. MILLER, M.D.
Timonium, Maryland



James Stacey

■ ■ ■

American Medical Association State-of-the-Art Conference on Adolescent Health Promotion. Proceedings. *Arthur Elster, Susan Panzarine, and Katrina Holt (eds). Arlington, Virginia: National Center for Education in Maternal and Child Health. 1993. 73 pages.*

The degeneration of adolescent health in recent years occasioned a state-of-the-art conference promoted by the American Medical Association. The assembled group of experts gathered to identify causes and suggest corrective mechanisms to reduce the increased morbidity and mortality in a population that should be enjoying good health. Although many adolescents have gained familial autonomy and an enhanced legal status, too many lack proper maturity and effective parental supervision. These young people are engaging increasingly in a variety of behavior patterns that pose serious threats to their continued good health and well-being.

School health programs play a major part in acquainting teenagers with existing health hazards, particularly in regard to infection with the human immunodeficiency virus (HIV) and sexual relations. Specific attention has also been directed to the prevention of smoking and alcohol and drug abuse, and to improvements in diet and exercise.

Despite these efforts, education has not achieved all the desired effects. Reasons for this relative failure include a lack of coordination by schools, community groups, and individuals. Adolescents cannot be successfully subjected to material intended for adults. Early prevention efforts also wrongfully assumed that merely providing facts could produce changes in adolescent behavior. To be effective, health educators must not only increase basic knowledge but must help young people assess their motivation for behavior change and provide people the necessary skills to make these changes possible.

A surprising similarity was evident in the presentations and subsequent discussions. Universal concepts applicable across school, medical, and community locations were unearthed. Conclusions reached were

1. Prevention efforts should be broadly based.
2. Programs should be relevant to the targeted audience.
3. Coordination of efforts in various

settings and professional disciplines is desirable.
4. Health promotion must have a societal priority to assure the proper use of financial and human resources.
5. Evaluation research should be given greater emphasis.
6. Health care providers, in general, need more training in adolescent health education.

The efforts to direct the thoughts of many groups interacting with adolescents to provide a desired behavior pattern consonant with a life of good quality are more than timely. Social workers, psychologists, educators, and pediatricians will find useful material in this book.

JOSEPH M. MILLER, M.D.
Timonium, Maryland

■ ■ ■

Music Therapy in Palliative/Hospice Care. *Susan Munro. St. Louis: MMB Music Inc. 1984 (second printing, 1993). 112 pages. $12.95*

Are you curious about music therapy? Do some of your patients, terminally ill from cancer, need more relief than just drugs can provide? Susan Munro is a certified music therapist at Montreal's Royal Victoria Hospital Palliative Care Service (a hospice unit) who has trained volunteers in hospice teams on the care of terminal cancer patients, both in the hospital setting and at home. She has provided a useful manual for music therapists.

Munro outlines the consultation roles of music therapists in palliative care staff conferences, discusses the relative values of taped and live music, and offers cautions about cultural issues that can arise in a hospital's multi-ethnic patient population. She provides some guidance in selection of patients and their continued living in the face of dying. Volunteer recruitment and training, as well as bereavement counseling, have separate chapters. Case histories detail the courses of several terminal illnesses and describe beneficial results of selected music.

Throughout the book, instructions for therapists include the themes of great sensitivity and deep respect for seriously ill and vulnerable patients on the Palliative Care Unit, as well as for the families and friends who rally to their support. Music therapists must search for and help each patient select the kind of music that relieves and comforts that individual in a hospice setting. Therapists cannot readily follow music therapy textbook techniques but must leave to the patient the choice of music and decisions on format or timing. Regular consultations with the physicians-in-charge and other members of the palliative care team are stressed. As with other treatment modalities, informed consent for each new part of the individualized music therapy must be scrupulously observed.

Hospice, or palliative care, is an approved mode of care designed to support the physical, psychosocial, and spiritual needs of people at the end of life, with the goal of allowing the dying process to unfold with a minimum of discomfort and the maintenance of dignity and quality of life.[1] A definitive textbook documents advances in the field of palliative care from its development by Dame Cicely Saunders in London in 1958 and its appearance in the United States in 1974.[2] Membership in the Academy of Hospice Physicians now exceeds 1,200 from different specialties. Hospice care teams of nurses, social workers, music therapists, and chaplains provide supporting forms of therapy and relief from suffering that complement traditional medical care.

Music therapy has been useful in treatment of autistic children and psychiatric care of adults. It has lowered anesthetic requirements in delivery suites and has helped relieve pain in burn patients, easing their hospital care through music therapy and relaxation techniques. This form of complementary therapy also has been found valuable in hospital care of surgical patients and has speeded speech rehabilitation in stroke patients. Several national associations of music therapists have established quality standards for this allied health specialty, and provide requisite certification. This short text defines a unique use of music therapy in palliative care, a developing medical specialty.

A word of caution. Read first the reprinted article and letters in the appendix. Then study the clinical care that music therapist Munro describes in the text's case reports. Physicians who would like to add skilled music care to their list of therapeutic options for difficult cases will find Appendix II and this manual helpful in furthering their understanding of music therapy.

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2. Doyle D, Hanks GWC, Macdonald N (eds). *Oxford Textbook of Palliative Medicine.* Oxford: Oxford University Press. 1993.

JOHN B. DEHOFF, M.D.
Cockeysville, Maryland ■

In Memoriam

Robert Eckel, M.D.

ROBERT ECKEL, M.D., a neurologist, died August 30 of cancer at Georgetown University Hospital. A native of Cleveland, Dr. Eckel graduated from Dartmouth College and Case-Western Reserve University, where he also completed his residency in internal medicine following an internship at the University of Cincinnati. He completed a second residency in neurology at the University of North Carolina and was a research fellow there before moving to Washington in 1963. A member of the board of the local Kaiser Permanente Organization and the Georgetown University School of Medicine clinical faculty, Dr. Eckel was a specialist in electromyography. Dr. Eckel was a member of the American Medical Association, the American Academy of Neurology, the American Association for the Advancement of Science, and the Montgomery County Medical Society, and served on the Professional Advisory Board of the Epilepsy Foundation of the National Capital Area. An accomplished musician, Dr. Eckel played clarinet and saxophone. Dr. Eckel was 45.

Edward J. Kitlowski, M.D.

EDWARD J. KITLOWSKI, M.D., medical director of New Beginnings at Hiddenbrook (an alcoholism and drug-dependency treatment center in Bel Air), died September 27 at Union Memorial Hospital following a heart attack. A native of Baltimore, Dr. Kitlowski graduated from the Polytechnic Institute, earned a master's degree in genetics from Johns Hopkins and a medical degree from Duke University. He served his internship and residency at Union Memorial Hospital, and practiced plastic and reconstructive surgery in the Baltimore area from 1963 until 1986. Dr. Kitlowski was a fellow of the Occuloplastic Society of America and the Vail Cosmetic Society, and a member of the American Medical Association, the Southern Medical Association, the Founders Group of the John Staige Davis Society, and the American Society of Plastic and Reconstruction Surgery. He had served as chairperson of the Med Chi Committee on Physician Rehabilitation and was a member of the Baltimore County Medical Association. A lecturer at the University of Maryland Department of Psychiatry, Dr. Kitlowski had also served as secretary of the Medical Professional Group of Alcoholics Anonymous, as well as on the board of Pathfinders (a halfway house) and impaired physicians committees at the state level and for St. Joseph Hospital. Dr Kitlowski was 65.

Merton L. White, M.D.

MERTON L. WHITE, M.D., a family practitioner, died August 12, 1993. A forty-year member of the Medical and Chirurgical Faculty of Maryland and a member of the Montgomery County Medical Society, Dr. White had six children and eleven grandchildren. Dr. White lived in Silver Spring.

Thomas Wilson, M.D.

THOMAS WILSON, M.D., a gynecologist and obstetrician, died July 31 of congestive heart failure at the Chesapeake Manor Care Center in Arnold, Maryland. Dr. Wilson, who was 72, retired in 1988 after 36 years in medicine. He was a graduate of Duke University and the George Washington University School of Medicine. He completed his residency at George Washington University Hospital, receiving further training at Hahnemann Medical College and Hospital and at Northwestern University medical school. During World War II, Dr. Wilson served in the Army Medical Corps, later serving as chief of obstetrics-gynecology and chief of the medical staff at Suburban Hospital. A member of the medical societies of Maryland, Montgomery County, and the District of Columbia, he was also a diplomate of the American Board of Obstetrics and Gynecology and the National Board of Medical Examiners. A delegate to the 1964 Republican National Convention, Dr. Wilson served for two years on the County Council; he was elected council president during his second year.

No information was available at press time for the following members:

Ki H. Bang, M.D.
(Baltimore County), July 1993

John Lesinski, M.D.
(Baltimore City)

Virginia Ling, M.D.
(Baltimore City), July 23, 1993

Lawrence Malin, M.D.
(Prince George's County)

Irvin Sauber, M.D.
(Baltimore City), April 1993 ■

Members in the News



SAMUEL M. ANDELMAN, M.D., a member of the Baltimore County Medical Association, was recently elected a fellow of the American College of Radiology for his outstanding contributions to the field of radiology. His radiology residency was completed at the Mount Sinai Hospital in New York. Since 1970, he has practiced radiology in Baltimore, Maryland, and is a staff radiologist at Franklin Square Hospital. Co-author of a recent book, *MRI of the Joints,* Dr. Andelman previously was assistant chief of radiology at Franklin Square Hospital and currently heads the Magnetic Resonance Imaging (MRI) Department of Drs. Copeland, Hyman and Shackman, P.A.



ALEX AZAR, M.D., an ophthalmologist in private practice in Salisbury, Maryland, was recently appointed to the seven-member Health Care Access and Cost Commission (HCACC) by Governor William Donald Schaefer. The primary responsibility of the HCACC is the practical interpretation of HB 1359, passed during the 1993 legislative session and expected to have a profound effect on health care delivery and financing in Maryland. Dr. Azar, who is board certified in ophthalmology and in occupational medicine, is a graduate of the University of Pittsburgh. He completed a residency in ophthalmology and in preventive medicine at Ohio State University, earning a master's degree at the same time. Long active in organized medicine, Dr. Azar has served as secretary/treasurer, vice president, and president of the Wicomico County Medical Society. For Med Chi, he as served as chairperson of the Bylaws Committee and of the Committee on Small Area Practice Variations; as a member of the Ad Hoc Committee to Select a New Chief Executive Officer and the Ad Hoc Committee to Evaluate Role Relationships in the State Medical Society; as third vice president and first vice president; and as alternate delegate to the American Medical Association. A member of numerous professional societies including the American College of Surgeons, the American Academy of Ophthalmology, the American Society of Cataract and Refractive Surgery, and the Maryland Society of Eye Physicians and Surgeons, Dr. Azar is also the author of numerous scientific articles.

SHAHID AZIZ, M.D., director of pediatrics at Harbor Hospital in Baltimore, Maryland, was recently designated as a diplomate of the American Board of Medical Management (ABMM), the national certifying agency for physician executives. Dr. Aziz completed his undergraduate education at Gordon College in Rawalpindi, Pakistan, and earned his medical degree in 1966 from King Edward Medical College in Lahore, Pakistan. Board certified in pediatrics, he has been with Harbor Hospital for seven years. He is a member of the American Academy of Pediatrics, the Baltimore City Medical Society, the American Diabetes Association, and the Juvenile Diabetes Foundation. He and his wife Jean have three children.



ROBERT S. GOODWIN, M.D., a family physician practicing since 1980 in Owen Brown and Oakland Mills, has completed four years of study at the University of Maryland and received his juris doctor (law) degree. Although he plans to continue to practice medicine, he also intends to become active in mediating medical malpractice claims, which he considers a more amiable method of resolving dispute than going to court. A member of the Howard County Medical Society, Dr. Goodwin also aims to become active in the legislative arena, particularly in the area of health care reform, where he hopes to offer a perspective from "both sides of the fence."



NOEL GRESSIEUX, M.D., who has practiced orthopaedic surgery at Carroll County General Hospital (CCGH) for 18 years, was recently elected president of the hospital's medical staff. As medical staff president, Dr. Gressieux chairs the Medical Executive Committee and the Medical Review

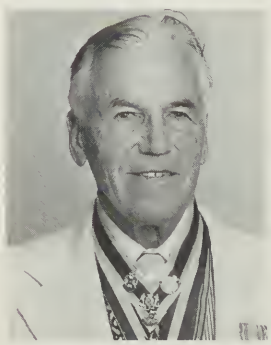
Committee. As a member of the CCGH Board of Directors, he serves as liaison and spokesperson for the interests of physicians in hospital affairs. Past chief of the Department of Surgery, Dr. Gressieux has maintained a private practice in Westminster since 1975, after completing residency programs at Sinai Hospital with rotations through Francis Scott Key, Johns Hopkins, and James Lawrence Kernan hospitals in Baltimore, Maryland.



J. ALEX HALLER, JR., M.D., who is professor of pediatric surgery, pediatrics, and emergency medicine at the Johns Hopkins University, was recently awarded the American Trauma Society's Curtis P. Artz Award for "his brilliant and creative work in establishing criteria for pediatric trauma units, his contributions to the curriculum of the pediatric ATLS [advanced trauma life support] course, and his leadership in trauma care as chief of the division of pediatric surgery at the Johns Hopkins Hospital." Dr. Haller is a certified instructor for the ATLS course of the American College of Surgeons and the advanced pediatric life support course of the American Academy of Pediatrics. A graduate of Vanderbilt University and the Johns Hopkins University School of Medicine, he chaired the Maryland State Committee on Trauma of the American College of Surgeons and the Committee on Trauma of the American Pediatric Surgical Association. He also has served as treasurer for the American Association for the Surgery of Trauma. Two current appointments include vice president of the Pan American Trauma Society and chairperson of the Committee on Pediatric Emergency Medicine for the Maryland Chapter of the American Academy of Pediatrics. A prolific author, Dr. Haller serves on the editorial boards of *Pediatrics*, *American Surgeon,* and the *Journal of Trauma.* He is currently associate medical director of the Maryland Institute for Emergency Medical Services System for Emergency Medical Services for Children. A board member of Marylanders against Handgun Abuse, Dr. Haller was recently honored for his leadership in establishing the Maryland child handgun accident prevention law—the strongest law of its kind in the nation.



MICHAEL M.E. JOHNS, M.D., who is dean of the medical faculty and vice president for medicine at the Johns Hopkins School of Medicine, was appointed to the Board of Directors of Blue Cross and Blue Shield of Maryland effective July 1, 1993. In addition, Dr. Johns was recently elected to the National Institute of Medicine in Washington, DC, in recognition of his major contributions to health and medicine. Dr. Johns was also elected fellow of the American Association for the Advancement of Science for his improvements in the management of malignant diseases of the head and neck. Dr. Johns earned a bachelor's degree in biology from Wayne State University and his medical degree from the University of Michigan medical school. Board certified in otolaryngology, he has published more than 150 scientific papers in the field of head and neck surgery and serves on the Editorial Board of the *Journal of the American Medical Association.* He is a member of the Associated Catholic Charities Corporate Board, the Johns Hopkins Hospital Board of Trustees, and the Center for Hospital Finance and Management National Advisory Council. He is also vice chairperson of the Governor's Commission on Women's Health and co-chairperson of the Governor's State of Maryland Science Week Blue Ribbon Panel. Dr. Johns has two children, both of whom are enrolled in medical school.



HENRY P. LAUGHLIN, M.D., Sc.D., Sc.S.D., received the International Patriot Award on July 2, 1993, at the Pan American University in Washington, DC. The award, the first of its kind, consists of a plaque and a medal with neck ribbon. A psychiatrist from Frederick, Maryland, Dr. Laughlin is a graduate of Ursinus College and Temple University. A former surgeon general and vice president general of the National Society of the Sons of the American Revolution (SAR) and past president of the Maryland Society of SAR, for which he now serves as president of the Council of Presidents, Dr. Laughlin is the inaugural president emeritus of the National Congress of Patriotic Organizations and currently serves as Maryland governor of the Sons and Daughters of the Pilgrims. He served in the US Navy as

physician and surgeon for seven years, rising to the rank of admiral. He became commodore of the US Navy Psychiatrists in 1978, a post he held for three terms. Author of a score of professional books and 148 scientific articles, Dr. Laughlin is editor of the *Physician's Practice Digest* and associate editor of the *Maryland Medical Journal*. Founder and first president of the American College of Psychiatrists, he was also founder and president of the American College of Psychoanalysts. Dr. Laughlin was on the faculty of the George Washington medical school for 35 years, and the University of Louisville School of Medicine for 15 years.



ABDUL NAYEEM, M.D., A.B.F.P., F.A.A.F.P., was recently installed as president of the Maryland Academy of Family Physicians, for which he had previously served as chairperson of the Scientific Programs Committee. Dr. Nayeem graduated from Gandhi Medical College, Osmania University, India, in 1967. He completed a rotating internship at Osmania General Hospital and Nilofer Hospital for Children in India. He then went to the United Kingdom to complete a residency in family practice. He obtained additional training in internal medicine, general surgery, obstetrics/gynecology, and psychiatry at George Washington University and St. Elizabeth's Hospital in Washington, DC. He has had a full-time family practice in Laurel, Maryland, since 1977. Active in organized medicine, Dr. Nayeem is currently vice chairperson of the Med Chi Continuing Medical Education Review Committee, and a member of the Peer Review Committee and the Board of Censors for the Prince George's County Medical Society. He is also a board member of the Maryland Education Foundation and the Greater Laurel-Beltsville Hospital Foundation. Married with three children, Dr. Nayeem is on the staff at Greater Laurel-Beltsville Hospital, Doctors Community Hospital, Prince George's Medical Center, and Washington Adventist Hospital.

MARK D. NOAR, M.D., a gastroenterologist in Towson, has been appointed by the American Society of Gastrointestinal Endoscopy as one of 50 nationwide trainers selected for their expertise in advanced endoscopic techniques. Dr. Noar has also been selected co-editor of a special issue of *Endoscopy*, which will focus on teaching models in gastrointestinal endoscopy and laparoscopic surgery. The creator of two award-winning tapes on diagnostic and therapeutic ERCP (endoscopic retrograde cholangiopancreatography), he is the author of a forthcoming book *Principles of Laparoscopic Surgery*. Dr. Noar earned a bachelor's degree in biology at Ursinus College in Collegeville, Pennsylvania; an M.P.H. from Tulane University in New Orleans; and a medical degree from the Universidad Central del Este in the Dominican Republic. He completed a therapeutic and surgical endoscopy fellowship at the University Hospital Hamburg in West Germany, a gastroenterology fellowship at the State University of New York (SUNY) in Brooklyn, and an internal medicine residency at the University of Nebraska Medical Center in Omaha.

Statement of ownership, management, and circulation

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Total: 7,568; average: 7,862.

Auxiliary

Mildred Taylor—Past president of the Med Chi Auxiliary becomes SMAA president

On October 29, 1993, Maryland will welcome the 70th president of the Southern Medical Association Auxiliary (SMAA), Mildred Taylor (Mrs. Charles E.), a past president of the Auxiliary to the Medical and Chirurgical Faculty of Maryland from Howard County. The Southern Medical Association (SMA) and its auxiliary is the second largest medical association in the United States. Almost 50,000 physicians in the SMA region are members or associate members. Although regional by definition, extending from Maryland to Florida and Texas to Missouri and comprising 16 states and the District of Columbia, SMA has a large out-of-region membership who attend the various programs and functions.



Figure 1. Priscilla Gerber, AMAA president, and Mildred Taylor, SMAA president-elect, hold a congratulatory cake at the 1993 Med Chi annual meeting in College Park.

Since auxiliary membership is contingent upon SMA membership of the physician spouse, it is important to know why SMA is thriving. SMA began in 1906 with the goal of fostering the art and science of medicine. The dues were modest then and continue to be. A spouse automatically becomes an auxiliary member when the physician joins the organization; there are no additional dues. An extensive array of programs and services is offered. Continuing medical education (CME) programs cover timely clinical, legal, and socioeconomic issues as well as practice-oriented subjects. Comprehensive access programs are available, including Dial-Access, Audio Access, Video Access, Computer Access, Information Access, and Clinical Concepts Home Study Series, that are of value to both physicians and spouses.



Figure 2. L to R: Priscilla Gerber, AMAA president; Mildred Taylor, SMAA president-elect and a past Med Chi Auxiliary president; Myrna Goodman, 1992-1993 Med Chi Auxiliary president; and Mary Straus, past AMAA president from Maryland, enjoy the Med Chi annual meeting at College Park, Maryland.

The *Southern Medical Journal*, a multispecialty, peer-reviewed publication, annually prints more than 450 original clinical articles directed toward the practicing physician and surgeon. Pension, purchasing programs, insurance, and travel services are offered through SMA. Its strength lies in excellent CME programs, extensive services, and a fine annual convention that offers an opportunity for physicians and their families to meet, learn, and enjoy time with each other.

As an auxiliary member, there is opportunity to be with spouse and family, attend the special events offered each year, and participate actively as part of the auxiliary leadership. The SMA Auxiliary was organized in New Orleans on November 25, 1924, and this year will begin its 70th year—again in New Orleans. The SMAA is noted for its recognition of physicians, accomplished through establishing National Doctors' Day in 1991 by then President George Bush. The red carnation is the symbol of this special day, and the program has been adopted throughout the United States.



Figure 3. Ching Barretto, Auxiliary councilor, accepts the Taylor Trophy Cup (awarded to the best Doctors' Day exhibit) from Mildred Taylor, SMAA president-elect.

In 1993, the American Medical Association (AMA) and the AMA Alliance (AMAA)—formerly the AMA Auxiliary—used the Doctors' Day postal plate for the first time on all their March mailings. This is not only an SMAA Doctors' Day program as it originated right here in Maryland with the Med Chi Public Relations Committee auxiliary representative (Mildred Taylor).

SMAA shares many activities and members with other medical spouse organizations. Since these associations draw from the basic membership—physicians' spouses—many members are active at a variety of levels. When Priscilla Gerber attended the Med Chi annual meeting in May of 1993, she came not only as AMAA president but as a native Marylander and a member of SMAA. Mary Strauss, our very special past AMAA president from Maryland, is also a member of SMAA. The new AMAA president-elect, Barbara Tippens of Georgia, is a very active SMAA member. In our state alone, there are many spouses who count SMAA, AMAA, the Philippine Medical Society Auxiliary, and the National Medical Association Auxiliary, as part of their auxiliary interests.

SMAA has grown to include a unique program of preserving the medical heritage of the southern states. One of the most prestigious awards for best presentation of southern medical research went to Med Chi's Harford County Auxiliary due to the guidance and hard work of Diane Sitaris who researched the fascinating life of Dr. John Archer, the first recipient of a medical diploma given in the colonies. Med Chi has the actual diploma, which is exhibited in the new library display case given by the Med Chi Auxiliary. This is just one example of the years of medical research compiled by SMAA's Medical Heritage Program.

The newest SMAA project is an intense focus on increasing breast cancer awareness. Billboards were donated throughout the south stressing that one in nine (now possibly one in eight) women could develop this



Figure 4. Mildred Taylor, Med Chi Auxiliary Health Projects chairperson, holds a mock-up of the breast cancer awareness billboards with the Orioles bird.

dread disease. In Maryland alone, 19 billboards have been sponsored from the mountains to the ocean. Countless posters, pins, and booklets have been distributed, and training sessions and educational programs have been sponsored.

But SMA and SMAA are not all work and no play. The annual convention held in New Orleans over Halloween gave evidence to that. The time and place alone meant that all participants could relax, enjoy, and "let the good times roll." Next year, SMA will meet in Orlando, Florida, with families for a very special time of orange blossoms, Disney World, and education. There will be an exciting SMAA program, spouse and companion recreational opportunities (golf, tennis, swimming), and a youth program including licensed day-care, plus, as always, educational opportunities. And most important of all, there will be time for everyone to do what is most enjoyed—meet old friends, make new ones, and join together in real southern style.

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CITY WIDE MANAGEMENT CO.

4th Annual conference on Addiction

The problems of addiction and the need for treatment are ever-present in our society. Primary care physicians and other health care professionals must be able to screen, diagnose, and initiate treatment for their patients with addictive disorders. The 4th Annual Conference on Addiction is designed to educate all health care professionals in fulfilling these essential patient needs.

The conference has been designated for 8 credit hours in Category 1 of the Physician's Recognition Award of the American Medical Association. Speakers at the conference will be Max A. Schneider, M.D.; David Nurco, D.S.W.; The Honorable Harold E. Hughes; Lee P. Brown, Ph.D.; Father Joseph C. Martin, S.S.; and N. Joseph Gagliardi, M.D.

Registration fees for this conference include tuition, continental breakfast, refreshment breaks, lunch, and materials. Costs are $60 for Med Chi members, $100 for nonmember physicians and Ph.D.s, $40 for allied health professionals, and no charge for medical students and residents. To register and for further information on this exceptional conference, call the Physician Rehabilitation Program at 410-962-5580 or 1-800-992-7010.

Saturday, December 11, 1993
7:30 am - 6:00 pm
The Sheraton International Hotel and Conference Center
7032 Elm Road, BWI Airport
Baltimore, MD 21240

American Medical Association
Physicians dedicated to the health of America

For Your Benefit

Three regional AMA meetings to expand two-way communications

Plans for three regional AMA-sponsored meetings, titled "Physicians Forum: Agenda for Action," have been announced by AMA President Joseph T. Painter, MD.

The goal of the fall meetings, to be held in San Francisco, Dallas and Philadelphia, will be to expand two-way communications between the AMA leadership and grass roots physicians.

"It will give us a chance to tell physicians--members and non-members alike--what the AMA has done and is planning to do on their behalf," Dr. Painter said. "We also want to hear from those physicians--about their problems, their concerns, their activities."

An important element of the regional events will be to inform physicians of what is really happening in government today.

"Given the stimulus for reform or change in the health delivery system, it is overwhelmingly important for the profession to be united in understanding of goals and objectives, as well as aware of and supportive of the actions being taken on behalf of the profession by its leadership," he said.

Clinton administration officials, members of Congress and other key players in system reform will take part in each meeting.

The meetings are being designed to build on the success of the AMA's Washington event, "A Time for New Partnership," in March.

"We were delighted with the response to the Washington meeting from physicians throughout the country," said Dr. Painter.

"We were particularly impressed by how many of the participants were not formally involved in organized medicine, but literally physicians from 'back home.' These three regional meetings will enable us to reach out to even more physicians and involve them in the health policy arena," he added.

Regional meeting dates and locations are:

- Oct. 23, San Francisco
- Nov. 5, Dallas
- Nov. 20, Philadelphia

There will be an optional reception on the evening preceding each event, and additional optional educational and leadership workshops on the morning after each one.

Complete program details will be announced shortly. For additional information and registration information, call (800) 621-8335.

Prepared by the Department of Communications Services. For information, call 800 AMA-3211, ext. 4416.

New physician pay disparity ended

Years of persistent AMA and Young Physicians Section grass roots efforts paid off as the House and Senate passed the budget reconciliation package, including provisions to end Medicare new physician pay disparity.

AMA lobbyists worked around the clock with Senate Republicans to retain new physicians and EKG provisions in the budget reconciliation package.

Pay equity provisions will take effect Jan. 1, 1994.

Numerous members of the AMA Young Physicians Section effectively and persistently pursued and supported this grass roots initiative, the AMA said.

Conglomerates could limit patient, physician choice, AMA warns

Increased power of insurance and hospital conglomerates could limit patient choice and take away physicians' right to make medical decisions, the AMA told Hillary Rodham Clinton in an Aug. 9 letter.

"Spurred by talk of 'managed competition' and the prospect of 'health alliances' with substantial purchasing power, the nation's largest health care insurers and hospital systems have already moved decisively to control health care delivery," AMA EVP James S. Todd, MD, wrote.

Although the AMA supports mergers to eliminate duplication and waste, the Association said the conglomerates' true aim is to establish large national firms that will dominate the "anticipated and newly configured health care marketplace."

Conglomerates could strip medical decision-making from physicians -- the very group that administers the care.

"How the administration's proposal deals with insurer and purchaser market power will determine how well the new system can ensure quality and preserve choice," Dr. Todd said.

Three issues were spelled out in the letter:

- Antitrust laws must be clarified so physicians can form competing systems and effectively negotiate with giant insurance and hospital plans.
- All managed care plans must meet minimum standards for physician involvement in their medical policies and guarantee physicians a significant role in the managed competition system of alliances and accountable health plans.
- Reform must include a pluralistic and competitive system with all forms of reimbursement.

Coalition formed to ensure medical liability reform

The AMA and five other health industry organizations have formed the Coalition for Effective National Medical Liability Reform, which will work to gain public and Congressional support for meaningful medical liability reform.

The new coalition is launching a full-fledged public relations, lobbying and grassroots campaign. It hopes to communicate the inadequacy of the current liability system and demonstrate that it increases health care costs, reduces access to care and damages the physician/patient relationship.

The group will work to gain support on patient safety issues and to ensure federal implementation of California-style tort reform, called the Medical Injury Compensation Reform Act or MICRA. The coalition also will continue to oppose the unproven "cost-shifting" concept of "enterprise liability."

Prepared by the Department of Communications Services. For information, call 800 AMA-3211, ext. 4416.

WELCOME!

The Medical and Chirurgical Faculty of Maryland welcomes the new members listed below. They join an organization with a 194-year history of dedicated service to improving the health and welfare of the people of Maryland. With the help and expertise of longtime members and the participation and input of new members, Med Chi can continue its proud tradition of ensuring quality health care.

BALTIMORE COUNTY

Bacaj, Patrick J.
5401 Old Court Road
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410-521-2200
PTH; BC 050; SS 648,828

Carle, Kenneth
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Dominguez, Jose E.
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Freeland, Carole A.
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410-628-7252
IM,NEP; BC 020

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Vinocur, Leigh
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EM

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IM

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IM,CD; BC 020,201; SS 264,312

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GE,IM; BC 020; SS 312,384,615,288

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FP,OBG,AN,GS; SS 636

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Krejci, Carmen M.
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410-332-4566

Mah, Alex L.
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Baltimore, MD 21201-1575
410-625-1266

Maniago, Eric M.
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Morton, Andrew W.
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301-530-0272

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7507B Weatherworn Way
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410-381-5709

SECTION: Surgery

Medical Policy

SUBJECT: **Plastic Surgery**

EFFECTIVE DATE: **8/27/93**

REVISED DATE **9/15/93**

CPT/HCPCS Code(s): 15780 - 15783, 15820 - 15823, 15824 - 15829, 15831, 15876 - 15879, 19316, 19318, 19324, 19325, 19328, 19330, 19340, 19342, 19350, 19357, 19361, 19362, 19364, 19366, 19370, 30400 - 30450, 67900 - 67906

Description of Service: According to the American Society of Plastic and Reconstructive Surgeons the specialty of plastic surgery includes two kinds of procedures:

Reconstructive Surgery

Reconstructive surgery is performed on abnormal structures of the body, caused by congenital defects, developmental abnormalities, trauma, infection, tumors or disease. It is generally performed to improve function, but may also be done to approximate a normal appearance.

Cosmetic Surgery

Cosmetic surgery is performed to reshape normal structures of the body in order to improve the patient's appearance and self-esteem.

Clinical Indications: Cosmetic surgery performed purely for the purpose of enhancing one's appearance is not eligible for coverage. However, surgery to correct congenital defects, developmental abnormalities, trauma, infections, tumors or disease is eligible for coverage because the surgery is considered reconstructive in nature.

Cosmetic surgery performed to treat psychiatric or emotional problems is not covered.

Corrective facial surgery will be considered cosmetic rather than reconstructive when there is no functional impairment present. However, some congenital or developmental anomalies may not result in functional impairment, but are so severely disfiguring as to merit consideration for corrective surgery. For example, the cranio-facial anomalies associated with Treacher-Collins Syndrome should be reviewed as an individual consideration.

If a non-covered cosmetic surgery is performed at the same operative period as a coverable surgical procedure, benefits will be provided for the coverable surgical procedure only.

Benefits are provided for complications arising from cosmetic surgery as long as infection, hemorrhage, or other serious documented medical complication occurs.

PAYMENT WILL BE MADE FOR THE FOLLOWING PROCEDURES WHEN PERFORMED FOR THE REASONS INDICATED:

1. **Augmentation Mammoplasty (CPT 19324, 19325)** Augmentation mammoplasty (breast enlargement) is generally a cosmetic procedure. When performed to replace absent breast tissue secondary to prior tumor removal, trauma or infection or to correct gross variation in breast size (post-mastectomy), the procedure is considered reconstructive.

2. **Mastopexy (CPT 19316)** This procedure will be denied as primarily cosmetic.

3. **Reconstructive Breast Surgery (CPT 19340, 19342, 19350, 19357, 19361, 19362, 19364, 19366)** Coverage will be based on the following limited coverage criteria:

   - Acquired deformity of the breast, 611.8

   - Personal history of breast carcinoma, V10.3

Reconstruction may be performed with an implant simultaneously with the breast's removal (CPT 19340), with an implant at a later date (CPT 19342); or with insertion of a tissue expander (CPT 19357). In the event of a total mastectomy, the nipple - areolar complex may be reconstructed (CPT 19350). Breast reconstruction may also be performed with a latissimus dorsi flap, transverse rectus abdominous flap with or without microvascular anastomosis, free flap or other technique (CPT 19361, 19362, 19364, 19366).

Following a mastectomy, reconstructive surgical procedures such as augmentation or reduction mammoplasty may be performed on the other breast to make the chest as symmetrical as possible.

4. **Reduction Mammoplasty (CPT 19318)** is the surgical excision of a substantial portion of the breast, including the skin and the underlying glandular tissue, until a clinically normal size is obtained. Reduction mammoplasty, while sometimes considered cosmetic to correct sagging or to improve appearance, is usually reconstructive and prompted by physical necessity. Female breast hypertrophy (macromastia) is the development of abnormally large breasts in the female. This condition can cause significant clinical manifestations when the excessive breast weight adversely affects the supporting structures of the shoulders, neck, and trunk. Coverage will be based on the following limited coverage criteria:

   a. Macromastia, gigantomastia with symptoms;

      - Intertrigo, 695.89
      - Neck and shoulder pain, 719.41, 723.5
      - Strap mark indentations, 695.89
      - Poor posture and postural backache, 724.5, 781.9
      - Restriction of physical activities

   b. With contralateral mastectomy and secondary reconstructive procedure.

      There are wide variations in the range of normal female height, body weight and associated breast

sizes; the amount of breast tissue that must be removed to relieve symptoms therefore varies with the height and weight of each patient (for example, a small-statured woman will need proportionally less breast tissue removed to alleviate signs and symptoms of macromastia than a larger woman. As a general rule, the removal of 300 or more grams of breast tissue must be removed from each breast (pathology report must be submitted).

5. **Removal of Breast Implants (CPT 19328, 19330, 19370)** For a patient who has had an implant(s) placed for reconstructive or cosmetic purposes, Medicare considers treatment of any one or more of the following conditions to be medically necessary:

   - Broken or failed implant
   - Infection
   - Implant extrusion
   - Siliconoma or granuloma
   - Interference with diagnosis of breast cancer
   - Painful capsular contracture with disfigurement

6. **Abdominal Lipectomy (CPT 15831)** is the surgical removal of excessive fat and skin from the abdomen. When surgery is performed to alleviate such complicating factors as a) inability to walk normally, b) chronic pain, c) ulceration created by the abdominal skin fold or dermatitis, such surgery is considered reconstructive. Pre-operative photographs may be required to support justification and should be supplied upon request.

7. **Suction - Assisted Lipectomy (CPT 15876 - 15879)** is a surgical procedure employing high vacuum pressure to "suction" away localized collections of unwanted fat. When the procedure is utilized to remove a lipoma it is considered reconstructive surgery.

8. **Dermabrasion (CPT 15780 - 15783)** Coverage will be provided when correcting defects resulting from traumatic injury, surgery, or disease. Dermabrasion performed for post-acne scarring is classified as cosmetic and is not eligible for payment.

9. **Rhytidectomy (CPT 15824 - 15829)** Coverage will be provided when functional impairment as a result of a disease state exists (e.g., facial paralysis).

10. **Blepharoplasty (CPT 15820 - 15823) and Blepharoptosis (CPT 67900 - 67906)** Blepharoplasty may be defined as any eyelid surgery that improves abnormal function, reconstructs deformities, or enhances appearance. It may be either reconstructive or cosmetic (aesthetic).

    Cosmetic Blepharoplasty

    When blepharoplasty is performed to improve a patient's appearance in the absence of any signs and/or symptoms of functional abnormalities, the procedure is considered cosmetic and non-covered under the Medicare program.

    Reconstructive Blepharoplasty

    When blepharoplasty is performed to correct visual impairment caused by drooping of the eyelids (ptosis); repair defects caused by trauma or tumor-ablative surgery (ectropion, entropian corneal exposure); treat periorbital sequelae of thyroid disease and nerve palsy; or relieve the painful symptoms of blepharospasm, the procedure should be considered reconstructive.

    Indications for Reconstructive Blepharoplasty:

    a. Pseudoptosis causing visual impairment ICD-9: 374.33, 374.34, 368.44, 701.8

        In this condition, the upper-lid skin becomes redundant and lax to such an extent that it "hoods" the eye, restricting the patient's upward gaze and blocking peripheral vision. When the upper-lid skin rests on the eyelashes, even forward gaze can be impaired. Skin redundancy (dermatochalasis) and/or

muscle laxity is corrected with a reconstructive upper-lid blepharoplasty that removes excess tissue and restores visual function. Patients may also develop intermittent swelling of the eyelids (blepharochalasis), which is often related to allergic reactions and is treated in a similar fashion.

Hooding of the lateral upper eyelids may be aggravated by redundancy and ptosis of the skin of the lateral forehead and eyebrows. This is an exaggerated effect of aging. Correction of eye lid skin redundancy when associated brow ptosis is untreated may not provide satisfactory results. In these cases, a brow lift with excision of excess forehead or anterior scalp skin may be required to suspend the brows in a more normal position and relieve the ptosis.

b. True ptosis with dermatochalasis, ICD-9: 374.33

Dermatochalasis (excessive skin redundancy) may mask the presence of ptosis. The added weight on the upper lids may aggravate a mild ptotic condition, leading to restricted vision. Correction of dermatochalasis is an integral part of ptosis treatment to restore vision.

c. Primary essential (idiopathic) blepharospasm, ICD-9: 333.81, 728.9

This condition is characterized by severe squinting, secondary to uncontrollable spasms of the periorbital muscles. Occasionally, it can be debilitating. Treatment includes extended blepharoplasty with wide resection of the orbicularis oculi muscle complex.

d. Intrinsic Eyelid Deformities

Secondary to birth defects, ICD-9: 743.61, 743.62, 743.63, 743.64, 743.65, 744.66

Post-traumatic, ICD-9: 906.0, 906.1, 906.2, 906.3, 906.4, 906.5

Keloid scar formation, ICD-9: 701.4, 709.61

Entropian, ICD-9: 374.01, 374.02, 374.03

Ectropion, ICD-9: 374.11, 374.12, 374.13, 374.14

These abnormalities may be congenital, a result of injury, or an after-effect of surgery for lesions on the eyelids. Surgery is performed to reconstruct the normal structure of the eyelids using local or distant tissue. If entropian (turned-in lash margins) or ectropion (eversion of lids) is left untreated, significant irritative keratitis can lead to cornea erosion. Both upper and lower lids may be affected by these conditions.

In cases of unilateral reconstruction, the opposite eyelid may require surgery to produce a symmetrical appearance.

e. Cranial nerve palsy, ICD-9: 351.0, 998.2

Partial or complete palsy of the facial (seventh cranial) nerve or the oculomotor (third cranial) nerve can cause true ptosis or pseudoptosis from marked periorbital muscle paralysis. Symptoms such as exposure keratitis and cornea erosion (facial nerve) or visual restriction (oculomotor nerve) may occur. When lesions involving the temporal branch of the facial nerve are present, treatment consists of reconstructive blepharoplasty with or without brow lift. Third-nerve palsy may require frontalis fascial suspension to obtain an adequate eyelid opening.

f. Thyroid disease, ICD-9: 242.0, 242.1, 242.2, 242.3242.4, 242.5, 242.6, 242.7, 242.8, 376.21

Symptoms associated with thyroid disease can include unilateral or bilateral upper-eyelid retraction and proptosis (protruding eye). Frequently, medical therapy for the thyroid pathology will resolve these deformities, but occasionally, reconstructive blepharoplasty is necessary to prevent corneal exposure and erosion.

Coverage for Blepharoplasty will be provided when visual impairment is documented by:

- visual field study, interpreted by the physician who performed the study, and
- documentation that the eyelids' condition is causing visual impairment

Pre-operative photographs may be required to support justification and should be supplied upon request.

Lower lid blepharoplasty is generally not reimbursable, since it is usually performed for cosmetic purposes. Benefits are provided only for severe cases which must be documented by photographs.

11. **Rhinoplasty (CPT 30400 - 30450)** Nasal surgery is defined as any procedure performed on the external or internal structures of the nose, septum or turbinates. This surgery may be performed to improve abnormal function, reconstruct congenital or acquired deformities, or to enhance appearance. It generally involves rearrangement or excision of the supporting bony and cartilaginous structures, and incision or excision of the overlying skin of the nose.

    Nasal surgery, including rhinoplasty, may be reconstructive or cosmetic in nature. Current CPT codes do not allow distinction of cosmetic or reconstructive procedures by specific codes, therefore categorization of each procedure is to be distinguished by the presence or absence of specific signs and/or symptoms.

    <u>Cosmetic Nasal Surgery</u>

    When nasal surgery is performed solely to improve the patient's appearance in the absence of any signs and/or symptoms of functional abnormalities, the procedure

should be considered cosmetic in nature and non-covered under the Medicare Program.

Reconstructive Nasal Surgery

When nasal surgery, including rhinoplasty, is performed to improve nasal respiratory function, correct anatomic abnormalities caused by birth defects or disease, or revise structural deformities produced by trauma, the procedure should be considered reconstructive.

Reconstructive nasal surgery is generally directed to improve nasal respiratory function (airway obstruction or stricture, synechia formation); repair defects caused by trauma (naso-septal deviation, intranasal cicatrix, dislocated nasal bone fractures, turbinate hypertrophy); treat congenital anatomic abnormalities (cleft lip nasal deformities, choanal atresia, oronasal or oromaxillary fistula); treat nasal cutaneous disease (rhinophyma, dermoid cyst); or to replace nasal tissue lost after tumor ablative surgery.

Billing Instructions: Physician documentation which fully supports the medical necessity for cosmetic/reconstructive surgery must accompany each claim. Pre-authorization requests are not required. Medicare does not pre-authorize cosmetic/reconstructive surgery cases.

Approved by: Barry S Gold M.D.

Barry S. Gold, M.D., F.A.C.P
Medical Director

plastic.sur

SECTION: Drugs and Biologicals

Medical Policy

SUBJECT: **Erythropoietin/EPO/Epoetin Alfa/PROCRIT/Epogen**

EFFECTIVE DATE: **6/1/89**

REVISED DATE: **4/1/93**

CPT/HCPCS Code(s): **A4649, Q9920 - Q9940, 90782**

Description of Service: EPO is a glycoprotein which stimulates red blood cell production. It is produced in the kidney and stimulates the division and differentiation of committed erythoid progenitors in the bone marrow. PROCRIT, a 165 amino acid glycoprotein manufactured by recombinant DNA technology, has the same biological effects as endogenous erythropoietin.

Clinical Indications:

1. EPO is covered for the treatment of anemia for patients with chronic renal failure who are on dialysis (ESRD patients) when:

   - It is administered in the renal dialysis facility;
   - It is administered incident to a physician's service or
   - It is administered by a home dialysis patient or patient caregiver who is determined competent to use the drug and meets the other conditions.

NOTE: Payment may not be made for EPO under the "incident to" provision when EPO is administered in the renal dialysis facility. For the "incident to" a physicians service provisions to be met, 1) the cost of EPO must represent an expense to the physician who administers it, 2) it must be administered by the physician or by someone in the physician's direct employ and 3) if administered by

someone in the physician's employ, it must be administered under the physician's direct, personal supervision.

Payment for EPO is made to the facility as an addition to the composite rate payment. The add-on amount is a nationally set payment and is the same for both independent and hospital based dialysis facilities regardless of geographic area. The payment rate is statutorily set at $11 per 1000 units rounded to the nearest 100 units.

SELF ADMINISTRATION OF EPO

Effective July 1, 1991, Medicare covers EPO and items related to its administration for **dialysis patients** who use EPO in the home when the following conditions are met:

- The patient's dialysis facility or the physician responsible for all the patient's dialysis related services makes a comprehensive assessment of the patient that includes measurement of the patient's hematocrit or hemoglobin, serum iron, transferrin saturation, serum ferritin, and blood pressure;

- The patient is on home dialysis (either peritoneal or hemodialysis method);

- The patient is trained to inject EPO or has an appropriate caregiver who is trained to inject EPO;

- Upon initiation of EPO therapy, the patient has a hematocrit of less than 30% or hemoglobin less than 10gm unless medical documentation justifies a patient's need for EPO with a higher hematocrit or hemoglobin level. For example, a patient with severe angina, severe pulmonary disease or severe hypotension may require EPO to prevent adverse symptoms even though the patient has a higher hematocrit or hemoglobin;

- The patient is under the care of the physician who is responsible for the dialysis related services and who prescribes EPO, and under the care of the renal dialysis facility that establishes the plan of

care for the services and monitors the progress of the home EPO therapy;

- The patient's physician or facility develops an appropriately designed protocol for the patient for the safe and effective use of the drug. The protocol must include:
  - Monitoring of blood pressure;
  - A review of diet and fluid modifications to monitor for adequate iron stores and hyperkalemia;
  - A re-evaluation of the dialysis prescription taking into account the patient's increased appetite and red blood cell volume;
  - A method for follow-up on blood tests and a mechanism for keeping the physician informed of the results; and
- The patient (or patient's caregiver) is trained by the facility to inject EPO, is capable of reading and understanding drug labeling, and is trained in, and capable of observing, aseptic techniques.
- The provider should limit the amount of EPO furnished to a two-month supply

The following providers may furnish EPO for home self-administration:

- Medicare approved dialysis facilities
- Suppliers of home dialysis equipment
- Suppliers of durable medical equipment

COVERAGE OF MEDICAL VISITS AND ADMINISTRATION SERVICES:

- Medical visits and drug administration services of physicians being reimbursed the monthly capitation

payment (MCP) are included in the MCP and should not be separately billed.

- An administration fee is payable to physicians administering EPO to the chronic renal disease patient who is not on dialysis. Report administration fees under CPT 90782.

- Non-MCP physicians must look to the MCP physician for compensation for his or her medical services, such as office visits. An administration fee is payable to a non-MCP physician. Report administration fees under CPT 90782.

- When a patient is on and off of dialysis, no additional allowance for medical services are available when the purpose of the visit is to receive the EPO injection.

2. EPO is also covered for the treatment of anemia in patients being treated with the anti-viral drug AZT (Zidovudine) which is currently being used to treat patients with acquired immunodeficiency syndrome (AIDS) and AIDS-related complex (ARC). **Patients with symptomatic anemia considered for EPO therapy should have a hematocrit less than 30% or hemoglobin less than 10gm.**

   EPO is not indicated for the treatment of anemia in HIV-infected patients due to other factors such as iron or folate deficiencies, hemolysis or gastrointestinal bleeding which should be managed appropriately. NOTE: Monitor iron levels during EPO therapy as iron will be rapidly utilized in making new red blood cells.

   EPO, at a dose of 100 - 300 units/kg three times per week, is effective in increasing the red blood cell level and decreasing transfusion requirements in anemic, HIV-infected patients treated with Zidovudine, when the endogenous serum erythropoietin level is < 500 mU/ml or less when patients are receiving a dose of Zidovudine < 4200 mg/week.

3. Effective 4/1/93, EPO is covered for the treatment of chemotherapy induced anemia in patients with non-myeloid malignancies. EPO is indicated to decrease the need for transfusions in patients who will be receiving concomitant chemotherapy for a minimum of two months. **Patients with symptomatic anemia considered for EPO therapy should have a hematocrit less than 30% or hemoglobin less than 10 gm.**

   It is not indicated for the treatment of anemia in cancer patients due to other factors such as iron or folate deficiencies, hemolysis or gastro intestinal bleeding which should be managed appropriately.

   The recommended EPO dose for the treatment of chemotherapy induced anemia is 150 - 300 units/kg administered subcutaneously three times weekly. A serum EPO level of 500 mU/ml or less must be present before coverage is allowed. For an optimal response, a serum EPO level of 200 mU/ml or less is suggested and treatment for an anemia with a level greater than this is not recommended in the labeled instructions.

   There is EPO testing available free of charge from a drug distributor.

4. Off-labeled Uses

   Additional uses of EPO in the treatment of anemic patients outside of the above listed indications, not experimental or investigative, will need to be accompanied by a Letter of Medical Necessity and peer reviewed literature documenting safety and efficacy.

   Where there have been published studies of the safety and efficacy of EPO therapy (multiple myeloma, 203.0 and myelodysplastic syndrome, 238.7) a Letter of Medical Necessity will need to accompany the claim. These claims will be reviewed by the Medical Director.

ROUTES OF ADMINISTRATION COVERED ARE:

1. intravenous, 1-3 times a week
2. subcutaneous, 1-6 times a week

Billing Instructions:

Initial Claims

Because of the amount of documentation required on initial claims for EPO, they must be submitted on paper claim forms; initial EPO claims cannot be accepted via electronic media. All initial claims must be accompanied by a copy of the invoice for the purchase of the drug.

All initial claims must be accompanied by a facsimile of the form shown attached to this policy and completed with all of the following information:

1. ICD-9-CM code for both the renal disease (585) and the anemia (281.9, 285.8, 285.9);
2. ICD-9-CM code for both the AIDS and ARC (042-044.9);
3. ICD-9-CM code for type of malignancy and the anemia (281.9, 285.8, 285.9);
4. Date and value of the most recent hematocrit and hemoglobin prior to initiation of EPO therapy;
5. Date and value of the most recent creatinine prior to initiation of EPO therapy for patients with chronic renal failure;
6. Date and value of EPO level for patients with non-myeloid malignancies and HIV-infected patients;
7. Dosage of EPO in units/kg.
8. Weight of patient in kg.
9. Number of units initially administered.

Subsequent Claims

Subsequent claims may be submitted either on paper or via electronic media and must include:

1. ICD-9-CM code for the disease and the anemia;
2. The patient's most recent hematocrit level (Report by using the applicable HCPCS procedure code from the list below);
3. The total number of units administered; and
4. The modifier code "EJ" following the code for the drug to indicate that this is a subsequent claim.

EPO for self-administration should be billed as follows:

1. Dialysis facilities furnishing EPO for self-administration must seek payment from Medicare Part A.
2. Suppliers of dialysis equipment or durable medical equipment who furnish EPO must file an **assigned** claim to Medicare Part B. Their claims must include:
    - the appropriate "Q" procedure code;
    - the appropriate documentation for EPO therapy; and
    - the name and UPIN of the physician who ordered the EPO for self-administration
3. Additionally, the supplier may bill for the furnishing of medically necessary syringes (HCPCS A4649) used for the administration of the drug.

HCPCS Codes for EPO

Q9920-- Injection of EPO, per 1,000 units, at pt. HCT of 20 or less

Q9921-- Injection of EPO, per 1,000 units, at pt. HCT of 21

Q9922--	Injection of EPO, per 1,000 units, at pt. HCT of 22
Q9923--	Injection of EPO, per 1,000 units, at pt. HCT of 23
Q9924--	Injection of EPO, per 1,000 units, at pt. HCT of 24
Q9925--	Injection of EPO, per 1,000 units, at pt. HCT of 25
Q9926--	Injection of EPO, per 1,000 units, at pt. HCT of 26
Q9927--	Injection of EPO, per 1,000 units, at pt. HCT of 27
Q9928--	Injection of EPO, per 1,000 units, at pt. HCT of 28
Q9929--	Injection of EPO, per 1,000 units, at pt. HCT of 29
Q9930--	Injection of EPO, per 1,000 units, at pt. HCT of 30
Q9931--	Injection of EPO, per 1,000 units, at pt. HCT of 31
Q9932--	Injection of EPO, per 1,000 units, at pt. HCT of 32
Q9933--	Injection of EPO, per 1,000 units, at pt. HCT of 33
Q9934--	Injection of EPO, per 1,000 units, at pt. HCT of 34
Q9935--	Injection of EPO, per 1,000 units, at pt. HCT of 35
Q9936--	Injection of EPO, per 1,000 units, at pt. HCT of 36
Q9937--	Injection of EPO, per 1,000 units, at pt. HCT of 37
Q9938--	Injection of EPO, per 1,000 units, at pt. HCT of 38
Q9939--	Injection of EPO, per 1,000 units, at pt. HCT of 39
Q9940--	Injection of EPO, per 1,000 units, at pt. HCT of 40 or above

The code which accurately reflects the patient's hematocrit level must be used when billing for EPO.

1. Enter a separate line item for injections at different HCT levels.

2. Multiple doses of EPO may be included as a single line item, while the patient's HCT remains the same.

3. The standard unit of EPO is 1000 units. Enter 1 in the "unit" field for every 1000 units administered. For example, if 12,000 units were administered, enter 12 as the units administered. When the dosage is not an even multiple of 1000, the dose should be rounded. For dose 1 to 499, round down. For dosages of 400 - 999, round up to the next 1000 units.

At anytime any of the following conditions exist, documentation must be submitted with the claim in order to justify the administration of EPO:

A. Initial Claim

- HCT greater than 29
- Serum creatinine less than 3
- Dose greater than 300 units/kg

B. Subsequent Claims

- HCT greater than 36

For those patients who respond to EPO therapy, coverage will be provided for EPO therapy until the patient's hemoglobin reaches 12 or the hematocrit reaches 36%. Coverage will not be provided for continued administration of EPO once the hemoglobin is 12 or higher or the hematocrit is 36% or higher. If, after 8 weeks of EPO therapy without blood transfusion, the patient's hemoglobin level has not risen by greater than 1 gram, or the hematocrit has not risen by greater than 3 points, than the patient's anemia would be considered non-responsive to EPO and continued EPO therapy could not be covered by Medicare. The Carrier Medical Director will make the final decision concerning continued coverage.

Approved by: Barry S Gold MD.

Barry S. Gold, M.D., F.A.C.P
Medical Director

EPO DOCUMENTATION FORM

1.	Diagnosis code for disease	_____
2.	Diagnosis code for anemia	_____
3.	Most recent creatinine level prior to EPO therapy	_____
4.	Date of most recent creatinine level prior to EPO therapy	_____
5.	Most recent hematocrit level prior to EPO therapy	_____
6.	Date of most recent hematocrit level prior to EPO	_____
7.	Most recent hematocrit level	_____
8.	Date of most recent hematocrit	_____
9.	Most recent EPO level	_____
10.	Date of most recent EPO level	_____
11.	Dose in units/kilograms	_____
12.	Patient's weight in kilograms	_____
13.	Patient's starting dose per kilogram	_____

SECTION: Radiology

Medical Policy

SUBJECT: **Mammography**

EFFECTIVE DATE: **1990**

REVISED DATE: **8/23/93**

CPT/HCPCS Code(s): **76090, 76091, 76092**

Description of Service: Mammography is an x-ray examination of the breast.

Clinical Indications:

- a patient has distinct signs and symptoms for which a mammogram is indicated
- a patient has a history of breast cancer; or
- a patient is asymptomatic but, on the basis of the patient's history and other factors the physician considers significant, the physician's judgement is that a mammogram is appropriate
- fibrocystic disease is coverable when supporting radiological reports are submitted.

USE OF MAMMOGRAM IN ROUTINE SCREENING

Effective January 1, 1991, Medicare began covering screening mammographies for eligible beneficiaries. Screening mammographies are regular, routine examinations for early detection of breast cancer. A doctor's prescription or referral is not necessary for an eligible beneficiary to be covered for a screening mammogram. **UNLIKE DIAGNOSTIC MAMMOGRAPHY, NO SYMPTOMS NEED BE PRESENT FOR THE EXAM TO BE COVERED.** Coverage applies as follows:

- No payment may be made for a screening mammography performed on an asymptomatic woman under 35 years of age;

- Pay for only one screening mammography performed on an asymptomatic woman between her 35th and 40th birthdays (ages 35 thru 39); and

- For an asymptomatic woman over 39, but under 50 years of age (ages 40 thru 49), pay for a screening mammography performed after 11 full months have passed following the month in which the last screening mammography was performed if the woman is at high risk of developing breast cancer because she:

  - Has a personal history of breast cancer, V10.3;
  - Has a personal history of biopsy-proven benign breast disease, V15.89;
  - Has a mother, sister, or daughter who has had breast cancer, V16.3; or
  - Has not given birth prior to age 30, V15.89

- Medicare will not pay for a screening mammography performed within 23 months following the month in which a previous screening mammography was performed if the above criteria do not apply (that is, the woman is not at high risk of developing breast cancer).

- For an asymptomatic woman over 49, but under 65 years of age (ages 50 thru 64), do not pay for a screening mammography performed within 11 months following the month in which a previous screening mammography was performed.

- For an asymptomatic woman over 64 years of age, do not pay for a screening mammography performed within 23 months following the month in which a previous screening mammography was performed.

Eligibility for Medicare and the screening mammography benefit generally begins at age 65, but certain individuals under 65 who are disabled are also eligible.

Billing Instructions: Claims should be submitted with the appropriate diagnosis. The screening mammography center/supplier must be listed

on the Screening Mammography Cert File. The referring physician must be listed on the claim. Screening mammography claims have a specific code that differentiates them from diagnostic mammography claims. Providers must submit CPT 76092 when billing Medicare B for reimbursement of a screening mammogram.

Please refer to attached chart to help determine whether payment for mammography screening is applicable.

Approved by: Barry S Gold MD.

Barry S. Gold, M.D., F.A.C.P
Medical Director

mammogry.rad

MAMMOGRAPHY SCREENING

Age	# Months Elapsed After Month of Last Screening	High Risk Indicator	Payment Applicable	Frequency
Under 35	N/A	N/A	N	N/A
35 thru 39	N/A	N/A	Y	1 time
40 thru 49	> 11 months	Y	Y	1 a year
40 thru 49	< 11 months	N/A	N	N/A
40 thru 49	> 23 months	N	Y	1 every other year
40 thru 49	< 23 months	N/A	N	N/A
50 thru 64	> 11 months	N/A	Y	1 a year
50 thru 64	< 11 months	N/A	N	N/A
Over 64	> 23 months	N/A	Y	1 every other year
Over 64	< 23 months	N/A	N	N/A

N/A = Not Applicable
N = No
Y = Yes


The Clinton Administration has just unveiled its plan for health system reform and parts of it have us concerned. We're concerned that this plan will keep your doctor from giving you the personalized care you deserve. We're concerned that limits to what your doctor can do for you will be controlled by bureaucrats.
We do think this plan is a good place to start. It includes a lot of things we've been pushing for from the beginning. Like health insurance for everyone and a requirement that employers must help pay for it. But it still has a long way to go.
That's why the 300,000 member physicians of the American Medical Association (AMA) are insisting that any final reform legislation put the health of our patients first. This plan not only involves billions of dollars.
It involves millions of lives.
And all of us must remember which is most important.
This is the moment of truth.
This is indeed the moment of truth for America's health care system. And now is the time to voice your concerns... before this plan becomes law. Find out where your doctor stands and let him or her know what you think. And for more information on health system reform, write the AMA, Department 4111, 515 North State St., Chicago, IL 60610 or call 800 348-3047.
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HMSS representatives won't want to miss this year's AMA-HMSS Interim Assembly Meeting. They will have an opportunity to learn about and discuss with AMA's leadership and staff the details of President Clinton's health care reform proposal as well as AMA's legislative strategy.

HMSS representatives will also be presented with an overview of physician and physician/hospital organizations, including the physician hospital organization, management services organizations, the foundation and physician equity models, and the hospital-affiliated professional corporation.

Review and analysis of President Clinton's Health Care Reform Plan

President Clinton released his new health care reform plan in September. HMSS representatives in this session will hear a full review and analysis of the plan.

Physician Organizations & Hospital Organizations

Henry E Golembesky, MD, director of Integrated Health Systems Practice of American Practices Management and former chief executive officer of UniMed America, will discuss and examine, from a physician's perspective, the advantages and disadvantages of the organizational structures being created in response to federal, state, and business health care reform initiatives. He also will identify the key elements of successful physician and physician/hospital organizations.

Dr Golembesky will be joined by several physicians who currently practice in these structures. They will share their experiences and cite the challenges and opportunities for physicians. HMSS representatives will be able to ask questions of the physician panelists and together explore mechanisms to maintain physician control in the credentialing of network providers, the monitoring and assessment of patient care, and the setting of quality of care standards/outcomes.

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Medical
and Chirurgical Faculty
of Maryland

The Maryland Medical Journal (MMJ) *is a monthly publication of the Medical and Chirurgical Faculty of Maryland. The journal's goals are educational and informative: the publishing of scientific articles (original research, case studies, and review articles) and other technical information, as well as editorials, letters, special articles (evaluations, position papers, reviews of nonscientific subjects), membership and legislative news, continuing medical education notices, and programs and policies of the faculty.*

Information for AUTHORS

- ***Letter of transmittal***—The letter of transmittal, which all authors must sign, should include the full names, degrees, titles, and affiliations of all authors, and the name, address, and phone number of the author to whom reprint requests and correspondence should be sent.

  The letter should include a statement to the effect that all authors have participated in the conception and design of the work and in the writing of the manuscript, and that they take public responsibility for it. The authors should attest to the validity and legitimacy of the data, and acknowledge that they have reviewed the final version of the manuscript and approve it for publication.

  In addition, the letter must include a paragraph that transfers copyright ownership to the *MMJ* in the event that the work is published.

- ***Manuscript preparation***—Manuscripts should be submitted to Editor, *MMJ*, 1211 Cathedral Street, Baltimore, MD 21201-5585. Manuscripts must be original material not previously published and not under consideration by another publication. An abstract of 100 to 300 words is required.

  All material, including references, tables, and legends, must be double-spaced. Pages should be numbered. (All abbreviations should be spelled out on first use.) The original manuscript plus one copy should be submitted on standard (8.5" x 11") bond paper. If at all possible, an IBM-compatible disk should be included, with the manuscript entered in a WordPerfect, Multimate, Wordstar, or ASCII format; the transmittal letter should identify the format used.

- ***References***—References are limited to those citations noted in the text. References should be numbered consecutively as they appear in the text and should be kept to a minimum (fewer than thirty-five). Personal communications and unpublished data are not acceptable. At a minimum, references should include names of all authors, complete title of the article cited, name of journal abbreviated according to *Index Medicus* (if abbreviation is not known, journal name should be spelled out fully), year of publication, volume number, and first and last page numbers. Sample references are as follows:

  1. Stevens MB. The clinical spectrum of SLE. Md Med J 1991; 10:875–85.
  2. Ropes MW. Characteristics, manifestations, and pathologic findings. In: Ropes MD, ed. Systemic Lupus Erythematosus. Cambridge, MA: Harvard University Press. 1976; 50–4.

- ***Tables***—Tables should be typed on separate sheets of paper, be numbered, and have a brief descriptive title. Data presented in tables should be self-explanatory and should supplement, not duplicate, the text; the Editor reserves the right to edit tables. Authors should be sure that statistics are consistent in both tables and text.

- ***Illustrations***—Illustrations include material that cannot be set in type. Photographic material must be submitted as high-contrast, glossy prints. Drawings and graphs must be done professionally in india ink on high-grade white drawing paper or be computer generated. Identification—including figure number, the title of manuscript, the name of corresponding author, and arrow indicating top—should be typed on a gummed label and affixed to the back of each illustration. Legends for illustrations should be typed on a separate page with numbers corresponding to those on the photographs or drawings. Recognizable photographs of patients are to be masked and should carry with them written permission for publication. Cost of printing color photographs must be borne by the author.

  Checklist

  - ☐ Original manuscript and one copy.
  - ☐ IBM-compatable disk in WordPerfect, Multimate, Wordstar, or ASCII.
  - ☐ Everything double-spaced.
  - ☐ Letter of transmittal, signed by all authors, that includes release of copyright, statement of authorship responsibility, title and affiliation of all authors, and identification and phone number of corresponding author.
  - ☐ Abstract of 100 to 300 words.
  - ☐ Permission-to-borrow letters for any previously published illustrations or tables

- ***Permissions***—Material taken from other sources must be accompanied by written permission from both author(s) and publisher allowing the *MMJ* to reproduce the information/figure.

- ***Editorial responsibility***—All manuscripts are acknowledged upon receipt. They are subject to peer review by an editorial board and, at times, by guest reviewers in appropriate fields of medicine, to determine the originality, validity, and importance of the content and conclusions. Authors are usually notified of the status of their papers (acceptance, revision, or rejection) within 4 to 8 weeks of receipt; however, longer delays are sometimes unavoidable. Reviewers' comments will be returned with rejected manuscripts at the discretion of the Editor. All guest reviewers will remain anonymous.

  Accepted manuscripts become the permanent property of the *MMJ* and are subject to copy editing. (The *Chicago Manual of Style* and the unabridged *Random House Dictionary of the English Language* are used as style guides.) The corresponding author is sent a reprint order form and galley proofs. S(he) then has 48 hours in which to make minor changes and clear all corrections and changes with co-authors; if proofs are not returned by the specified date, they will be considered approved as typeset. ■

Shady Grove Adventist Hospital

9901 Medical Center Drive, Rockville, Maryland. Info: 301-279-6115.

Headaches in children and adults	**Oct. 2**
Update on antibiotic use in upper and lower respiratory infection	**Oct. 14**
Muscular skeletal problems in children and young adults	**Oct. 21**
Tumor conference	**Oct. 28**
Sorting it all out	**Dec. 16**

The Johns Hopkins Medical Institutions

All courses at the Thomas B. Turner Building unless otherwise indicated. For information on continuing medical education activities, contact the Office of Continuing Education, 720 Rutland Ave., Baltimore, Maryland 21205 (410-955-2959).

Rising to the challenge: Crisis intervention in the critical care setting. Cat 1 AMA/PRA credits available. Fee: $75. — **Oct. 4**

19th annual topics in gastroenterology and liver disease. Cat 1 AMA/PRA credits available. Fee $495 physicians; $250 residents and fellows. — **Oct. 6–8**

35th annual Emil Novak memorial course. 45 Cat 1 AMA/PRA credits; 53 ACOG cognates. Fee: $675 physicians; $475 residents, fellows, and allied health professionals. — **Oct. 18–23**

Advanced pediatric life support courses. 20 Cat 1 AMA/PRA credits; 18.5 AAFP prescribed hours; 20 AAP credit hours; 17 ACEP category 1 credits. Fee: $525. — **Oct. 25–27**

Diabetic retinopathy. 8 Cat 1 AMA/PRA credits. Fee: $200 physicians; $100 residents, fellows, and allied health professionals. — **Oct. 29**

Practical management of the uveitis patient. 8 Cat 1 AMA/PRA credits. Fee: $200 physicians; $100 residents, fellows, and allied health professionals. — **Oct. 30**

Hemodynamic monitoring, patient care and pulmonary artery catheterization—A hands-on course. 14 Cat 1 AMA/PRA credits available. Fee $575. — **Oct. 30–31**

Ethics and politics related to clinical trials. Cat 1 AMA/PRA credits available. Fee: TBA. — **Nov. 3–4**

Topics in ambulatory medicine VI. 20.5 Cat 1 AMA/PRA credits; 17 AAFP prescribed hours. Fee: $490 physicians; $290 residents, fellows, and allied health professionals. — **Nov. 3–5**

Progress in pediatrics. 11 Cat 1 AMA/PRA credits. Fee: $140 physicians; $80 residents and fellows. — **Nov. 5–6**

Update on sinusitis. Cat 1 AMA/PRA credits available. Fee: TBA. — **Nov. 8**

Neurology for the primary practitioner. 6 Cat 1 AMA/PRA credits; 6 AAFP prescribed hours. Fee: $125 physicians; $75 residents, fellows, and allied health professionals. — **Dec. 11**

Excimer laser with lab workshop. Fee: none. — **Dec. 11**

Radial keratotomy wet lab workshop. Fee: none. — **Dec. 11**

The Johns Hopkins Medical Institutions (continued)

Continuously throughout the year

Visiting preceptorship in pediatric critical care medicine. Ongoing five-day preceptorship by appointment. 40 Cat 1 AMA/PRA credits. Fee: $600.

The department of radiology and radiological sciences offers several courses in abdominal and obstetrical ultrasound. Info: P. Williams, 410-955-3169.

Visiting physicians. Offered throughout the year for experience in the lab and participation in read-in sessions; by appointment only. 40 Cat 1 AMA/PRA credits. Fee: $500.

Johns Hopkins medical grand rounds. Accredited audiovisual continuing education series of case discussions for clinicians; 30 topics per year in five bimonthly programs. Individual and group subscriptions. 40 Cat 1 AMA/PRA credits. Info: 410-955-3988.

University of Maryland

For each course, additional information may be obtained by contacting the Program of Continuing Education, University of Maryland School of Medicine, Room 14-011, BRB, 655 W. Baltimore St., Baltimore, Maryland 21201 (410-328-3956) or by calling the phone number listed after a specific program. FAX 410-328-3103.

Cardiovascular risk factors in the elderly: medical and pharmacologic management, at the Baltimore Grand, Baltimore, Maryland. 7 Cat 1 AMA/PRA credits. Fee: $60 physicians. Info: Reba Cornman, 410-706-4327. — **Oct. 5**

R. Adams Cowley 16th annual national trauma symposium, at the Hyatt Regency, Baltimore, Maryland. Info: 410-328-2399. — **Nov. 16–20,1994**

Miscellaneous meetings

International liver symposium, sponsored by the George Washington University, at the Marriott Crystal Gateway Hotel, Arlington, Virginia. 14 Cat 1 AMA/PRA credits. Fee: $350. Info: Hattie Johnson, 202-687-8735. — **Oct. 1–3**

Clinical cardiac electrophysiology, pacemakers, and cardioverter-defibrillators, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. — **Oct. 4–7**

Causes of the medical malpractice crisis, sponsored by the Baltimore City Medical Society. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-625-0022. — **Oct. 7**

Psycho-economics: Clinical psychiatry and health care reform in the '90s, sponsored by the American Psychiatric Association, in Baltimore, Maryland. 34 Cat 1 AMA/PRA credits. Info: 202-682-6174. — **Oct. 8–12**

Gastroenterology board review course, sponsored by the George Washington University, at the Marriott Crystal Gateway Hotel, Arlington, Virginia. 42 Cat 1 AMA/PRA credits. Fee: $650 physicians; $500 residents and fellows. Info: Daniel E. Reichard, 202-994-4285. — **Oct. 9–13**

Medical oncology board review course, sponsored by the George Washington University, at the Ritz-Carlton, Pentagon City, Virginia. 38 Cat 1 AMA/PRA credits. Fee: $695 physicians; $500 residents and fellows. Info: John F. Vargo, 202-994-4285. — **Oct. 9–13**

Miscellaneous meetings (continued)

Clinical applications of Doppler and transesophageal echocardiography, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. — **Oct. 14–16**

New techniques and concepts in cardiology, sponsored by the American College of Cardiology, at the Hyatt Regency Hotel, Washington, DC. 16 Cat 1 AMA/PRA credits. Info: 1-800-257-4739. — **Oct. 21–23**

Nuclear cardiology: A case study approach, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. — **Oct. 21–23**

Cancer in women conference, at the Greater Baltimore Medical Center (GBMC), Baltimore, Maryland. Info: Celeste Morrissey, 410-828-3670. — **Oct. 21 & 28 and Nov. 4 & 11**

Vascular radiology conference, at the Greater Baltimore Medical Center (GBMC), Baltimore, Maryland. Info: Celeste Morrissey, 410-828-3670. — **Oct. 23**

Maryland Academy of Family Physicians regional mini conference, at the Tidewater Inn, Easton, Maryland. 6 Cat 1 AMA/PRA credits; 6 AAFP prescribed hours. Fee: $55 members; $75 nonmembers; $35 paramedicals; no charge for residents, medical students, MAFP retired and life members. Info: William Jones, 410-747-1980. — **Oct. 23**

7th annual national disability management conference and exhibit, sponsored by the Washington Business Group on Health, at the Crystal Gateway Marriott, Arlington, Virginia. Info: Kristina Tanasichuk, 202-408-9320. — **Oct. 25–26**

Topics in clinical rheumatology: An arthritis update for internists, family practitioners, orthopaedists, rheumatologists, other primary care practitioners, and allied health professionals, sponsored by the Arthritis Foundation, Maryland Chapter, at the Stouffer Harborplace Hotel, Baltimore, Maryland. Cat 1 AMA/PRA credits available. Fee: $50. Info: J. Karen Krug, 410-602-0160. — **Oct. 28**

Cases in echocardiography: TEE, Doppler and stress—Interpretation and clinical decision making for the advanced echocardiographer, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. — **Oct. 28–30**

Cardiology in women, at the Greater Baltimore Medical Center (GBMC), Baltimore, Maryland. Info: Celeste Morrissey, 410-828-3670. — **Oct. 29**

The future of integrated health care systems conference, sponsored by The Health Care Forum and Inova Health System, at the Hyatt Regency, Reston, Virginia. 13.25 Cat 1 AMA/PRA credits. Info: 415-421-8810. — **Nov. 8–11**

Cardiac auscultation for physician assistants, nurse practitioners, and cardiac nurses, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. — **Dec. 1–3**

Fourth annual maternal and child health update, cosponsored by the Maryland Department of Health and Mental Hygiene, and the Maryland Coalition for Healthy Mothers and Healthy Babies, at the University of Maryland College Park Adult Education Center, College Park, Maryland. Info: 1-410-225-6726. — **Dec. 3**

Miscellaneous meetings (continued)

Twenty-first annual Williamsburg conference on heart disease, sponsored by the American College of Cardiology, in Williamsburg, Virginia. 19 Cat 1 AMA/PRA credits. Info: 1-800-257-4739. **Dec. 5–8**

Advanced echocardiography: Case studies and concepts, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. **Dec. 13–15**

Med Chi 1994 annual meeting, at the Ramada Convention Center, Hagerstown, Maryland. Cat 1AMA/PRA credits available. Info: Vivian Smith, 410-539-0872 or 800-492-1056. **May 12–14, 1994**

Continuously throughout the year

Fluorescein angiography conference, sponsored by the Retina Center, St. Joseph Hospital, Baltimore, Maryland, first and third Mondays of each month; 8:00-9:00 am. Fee: none. Info: R. Classon, 410-337-4500.



PHYSICIAN'S RECOGNITION AWARD

During July and August 1993, the physicians listed below received the American Medical Association (AMA) Physician's Recognition Award. Established in 1968, the award's purpose is to encourage physician participation in continuing medical education and to recognize those physicians who have voluntarily completed programs of continuing medical education.

James E. Abell
Fritz Apollon
Wiliam Perry Arnold
Herbert S B. Baraf
Allan Sidney Berger
David Alan Bianchi
Bruce Stephen Bloom
Patricia Church Brown
Robert L. Bumgarner
John Russell Burton
Venkataraman P. Chandar
Stephen Peter Cohen
Huell Edward Connor
Herbert B. Copeland
Ted Murray Dawson
Rosita Hao Dee
Terrence Xavier Dwyer
Willarda V. Edwards
Habibollah Farhoudi
Reza Feiz
Stanley Albert Forster
James Norman Frame
Ivan H. Garcia-Lopez
Donald E. Garland
Jay Barry Greenberg
Larry Bruce Grossman
Pamela Guha
James William Harding
LA Floyd H. Hobbs
Dwight Edward Hooper
Allen Herbert Judman
Mohammad J. Kaviani
James Sheridan Kelley
Kyung Sik Kim
Melvin Joel Kordon
William David Lamm
Michael Fong Lee
Kam-Ken Leung
Paul Elwood Lewis
Shu-Chai Willy Lin
Rafael Atanasio Lopez
Vivian Lizzette Lugo
Mukesh Prahl Adbhai Luhar
Patrick David Mansfield
Richard Sheldon Margolis
Lawrence Maryanov
Daniel Carroll McCabe
Catherine F. McCoy
Arnold H. Michael
Alan Barry Miller
Frederick W. Miltenberger
Joseph Phillips Mock
Daniel Alphonza Nash
Richard Austin Nicklas
Julio Cesar Novoa
Istvan Nyirjesy
Chan Hyun Oh
Uchechi Opaigbeogu
Mario Rene Ortega
Lawrence L. Packer
Lawrence Charles Pakula
Rita Panoscha
Carolyn J. Pass
Geo Branch Patrick
Dale Wilton Pcsolyar
David Mark Posner
Paul Eddie Pritchett
Nohammad H. Razavi
J. Garrett Reilly
Magno Paraiso Roque
Imran Samad
Michael Allen Schwartz
John Christopher Seymour
George William Shaffer
Larry Arnold Sheingorn
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A videotape, *Finding Strength: A Look at the Pediatric Branch,* is available to health care professionals and families interested in learning more about programs and research protocols at the Branch. Also available are two videotapes for health care professionals working with HIV-infected children and their families: *Conducting an HIV Parent Support Group* and *I Need a Friend: Kids Talk About the AIDS Virus.*



Or Would You Like to Schedule a Speaker?

If you plan to show the tape at a meeting of health professionals or other interested persons, we would be happy to arrange for a staff member to attend the showing and conduct a follow-up question and answer session. To schedule a presentation or order tapes, call Molly Matthews at (301) 951–1104.

For patient referral or information, contact: Philip Pizzo, M.D.
Chief, Pediatric Branch, National Cancer Institute, Bethesda, Maryland 20892 • (301) 402-0696

Call for Papers

1994 International Conference on Physician Health
September 16-20, 1994. Ottawa, Ontario, Canada

"Stress: The Profession, the Family and You"

The 1994 International Conference on Physician Health, co-sponsored by the American Medical Association, the Federation of State Medical Boards, the Canadian Medical Association, and the Federation of Medical Licensing Authorities of Canada is scheduled for September 16-20, 1994, at the Ottawa Westin Hotel.

Ottawa is Canada's capital and offers many national museums, over 60 miles of bicycle paths, hiking in Gateneau park, squash courts and swimming at the hotel and golf nearby.

The conference will provide a forum for practitioners and researchers to present recent findings and innovative treatment and education programs in physician health. This conference will address a range of issues, such as AIDS, HIV, problems related to aging, mental illness, substance abuse and physical disabilities and limitations, including those caused by general medical conditions. Possible topics for presentation include: presentation and treatment of health problems among physicians, the impact of disorders on physicians' families and practices, medical-legal issues facing hospital administrations and licensing boards, and material on health promotion and disease prevention. *Abstracts which address issues related to these topics (i.e., prevention, diagnosis, treatment, rehabilitation), but not dealing specifically with physicians are also welcome.*

Three types of presentations regarding these physician health issues are invited:

- **Poster Presentations**
  Written presentations of data-based research, epidemiological research, or program descriptions.

- **Paper Sessions**
  Oral presentation of scientific, data-based findings relative to the topic of physician health.

  Abstracts for poster presentations and paper sessions should contain an introductory statement on the significance of subject matter. Description of methods, results, and conclusions should follow the introductory statement.

- **Workshops**
  Training or instructional presentations, designed to improve specific skills of persons who work in the area of physician health.

  Abstracts for workshops should contain information on the program's intended audience, goals, teaching strategies, and materials. Evaluation data should be summarized

Abstracts may not exceed 200 words. Any abstracts exceeding that length will be rejected. Abstracts should be typed, double spaced, and mailed (not faxed). Four copies of the abstract should be sent, along with one self-addressed, stamped envelope. All submissions must list the primary and secondary authors and their professional affiliations. Telephone number and address of primary author must also be included.

Submissions *must* be received by February 1, 1994.

Abstracts will be submitted for blind review. Abstracts will be judged on their applicability to the conference topic area and their scientific merit. The decisions of the blind reviewers will be communicated to the abstract's primary author by April 1, 1994.

All presenters are expected to register for the conference at the AMA member rate. We are unable to provide any financial support for presenters. Presenters will also be responsible for their own transportation and hotel expenses, as well as making all reservations for same.

Send all materials to:
Elaine M. Tejcek, Physicians Health Foundation, American Medical Association, 515 N. State Street, Chicago, IL 60610.

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EPIDEMIOLOGY & DISEASE CONTROL PROGRAM
201 W. Preston Street, Baltimore, Maryland 21201 (410)225-6700

October, 1993

Prevention and Control of Influenza

Influenza in Maryland 1992 - 1993

During the 1992-93 influenza season (October 1992 through May 1993) a total of 47 influenza isolates were reported to the Maryland Department of Health and Mental Hygiene (DHMH). Because most cases of influenza are not confirmed by culture or serology, and because influenza is not a reportable disease in Maryland, this is assumed to represent a small fraction of the actual number of influenza cases. Twenty-eight (60%) were influenza A and 19 (40%) were influenza B. Seven of the influenza A isolates were sent to the Centers for Disease Control and Prevention (CDC) for subtyping and all seven were identified as influenza A/Beijing/32/92-like (H3N2) viruses. This strain is different than the A(H3N2) component that was included in the 1992-93 influenza vaccine. The greatest number of isolates (8) came from Baltimore City and the remaining 39 isolates came from 12 of Maryland's 23 counties. Forty of the 47 reports noted the case's age: 25 (63%) were from persons greater than 65 years of age. The peak weeks of influenza activity as evidenced by collection dates for culture positive specimens were from February 14, 1993 through March 27, 1993. This peak in activity was approximately eight weeks later than the peak during the 1991-92 season. The mean time of reporting positive culture results to the local or state health department was approximately 11 days after specimen collection.

During the 1992-93 influenza season, Maryland had 17 reported outbreaks of culture-confirmed influenza and 55 reported outbreaks of influenza-like illness (ILI). Of the 17 confirmed influenza outbreaks, 8 were due to influenza A, 7 were due to influenza B, and 2 were mixed influenza A and B. No other respiratory viruses were isolated from patients associated with either influenza or ILI outbreaks. All 17 influenza outbreaks were reported between February 21 and March 27. All 55 of the reported ILI outbreaks occurred in nursing homes as did 16 (94%) of the 17 cultured-confirmed influenza outbreaks. At least 130 hospitalizations and 28 deaths occurred during the 71 outbreaks in nursing homes.

Reports of excess school absenteeism due to influenza-like illness decreased significantly from that reported during the 1991-92 influenza season (30 versus 128, respectively).

Influenza Vaccine 1993-1994

The following three pages contain the "official" *Important Information Statement* (IIS) for the 1993-94 influenza vaccine as well as the *Vaccine Administration Record*. Please reproduce these for your office use or contact the Immunization Division, DHMH, for additional copies at (410) 225-6679. The IIS contains a brief summary of the recommendations for the use of the 1993-94 influenza vaccine and is intended to provide information to the vaccine recipient (or parent or guardian). The complete text of the Advisory Committee on Immunization Practices (ACIP) recommendations can be found in *Morbidity and Mortality Weekly Report* (MMWR 1993;42[No. RR-6]:1-14). A copy of these recommendations can also be obtained from the Division of Immunization. ACIP recommendations for the use of amantadine are expected to be published later this fall in the MMWR.

IMPORTANT INFORMATION ABOUT INFLUENZA AND INFLUENZA VACCINE, (1993-1994)

Please read this carefully!

WHAT IS INFLUENZA ("FLU")?

Influenza (or "flu") is a viral infection of the nose, throat, bronchial tubes, and lungs that can make someone of any age ill. Usually the flu occurs in the United States from about November to April. If you get the flu, you usually have fever, chills, cough, and soreness and aching in your back, arms, and legs. Although most people are ill for only a few days, some persons have a much more serious illness and may need to go to the hospital. On average, thousands of people die each year in the United States from the flu or related complications.

WHO SHOULD GET INFLUENZA VACCINE?

Because influenza is usually not life threatening in healthy individuals and most people recover fully, health officials emphasize the use of vaccine for the elderly and people with other health problems which make these individuals more likely to be seriously ill or to die from the flu or its complications. For example, people who after even light exercise become short of breath due to diseases affecting their heart or lungs, and people who have low resistance to infections, are likely to be more seriously affected by the flu. Thus, the following groups are at increased risk for serious illness with the flu and should receive vaccine:

- All people 65 years of age or older.
- Adults and children with long-term heart or lung problems which caused them to see a doctor regularly, or to be admitted to a hospital for care during the past year.
- Residents of nursing homes, and other institutions housing patients of any age who have serious long-term health problems.
- People of any age who during the past year have regularly seen a doctor or have been admitted to a hospital for treatment for kidney disease, cystic fibrosis, chronic metabolic disease such as diabetes, anemia ("low blood"), or severe asthma.
- People who have a type of cancer or immunological disorder (or use certain types of medicines) that lowers the body's normal resistance to infections. (Because influenza might cause serious illness and complications in persons infected with the HIV virus which causesAIDS, these individuals should receive influenza vaccine.)
- Children and teenagers (6 months through 18 years of age) on long-term treatment with aspirin who, if they catch the flu, may be at risk of getting Reye syndrome (a childhood disease that causes coma, liver damage, and death).

Medical staff in health-care facilities should be vaccinated, to reduce the possibility that high-risk patients might catch the flu when receiving medical care. Family members or others who provide care to high-risk persons at home should also be vaccinated. The possibility for spreading the flu to high-risk persons can be reduced by vaccinating:

- Doctors, nurses, and other personnel in both hospital and outpatient care settings.
- Personnel of nursing homes and chronic-care facilities who have contact with patients or residents.
- Individuals who provide care to high-risk persons at home, such as visiting nurses and volunteers, as well as all household members, including children, whether or not they are providers of care.

In addition, a flu shot may be given to:

- Persons wishing to reduce their chances of catching the flu.
- Persons who provide essential community services.
- Students or other persons in schools and colleges if outbreaks would cause major disruptions of school activities.

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
Public Health Service
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CENTERS FOR DISEASE CONTROL AND PREVENTION

- Persons traveling to the tropics at any time of the year or to countries south of the equator during April - September. (Persons with high-risk medical conditions and those ages 65 and older who are traveling as indicated above especially should be encouraged to receive vaccine.)

INFLUENZA VACCINE:

The viruses that cause flu frequently change, so people who have been infected or given a flu shot in previous years may become infected with a new strain. Because of this, and because any immunity produced by the flu shot will possibly decrease in the year after vaccination, persons in the high-risk groups listed above should be vaccinated every year. This year's flu shot contains viruses representing the A/Texas/36/91 (H1N1), A/Beijing/32/92 (H3N2), and B/Panama/45/90 strains, which are thought to be most likely to occur in the United States next winter. All the viruses in the vaccine are killed so they cannot infect anyone. Vaccine will begin to provide its protective effect after about one or two weeks, and immunity may decrease, on average, after several months. Flu shots will not fully protect all persons who get them against the flu. They also will not protect against other illnesses that resemble the flu.

DOSAGE:

Only a single flu shot is needed each season for persons 9 years of age and older, but children less than 9 years of age may need a second shot after a month. The doctor or nurse giving the flu shot will discuss this with parents or guardians. Children less than 13 years old should be given only vaccine that has been chemically treated during manufacture (split virus) to reduce chances of any side effects. Split-virus vaccines can also be used by adults.

POSSIBLE SIDE EFFECTS FROM THE VACCINE:

Most people have no side effects from recent influenza vaccines. Flu shots are given by injection, usually into a muscle of the upper arm. This may cause soreness for a day or two at the injection site and occasionally may also cause a fever or achiness for one or two days. Unlike the 1976 swine flu vaccine, recent flu shots have not been clearly linked to the paralytic illness Guillain-Barré syndrome (GBS). In 1990-91 there may have been a small increase in GBS cases in vaccinated persons 18 to 64 years of age, but not in those ≥ 65 years. This possible association with GBS was not as convincing as with the swine flu vaccine. Even if GBS were a true side effect, the very low estimated risk of getting GBS is less than that of getting severe influenza that could be prevented by vaccine. As is the case with most drugs or vaccines, there is a possibility that allergic or more serious reactions, or even death, could occur with the flu shot.

SIMULTANEOUS USE OF OTHER VACCINES:

The target group for influenza and pneumococcal vaccination overlap. Both vaccines can be given at the same time at different sites without increasing side effects. High-risk children may also receive influenza vaccine at the same time as measles, mumps, rubella, *Haemophilus influenzae* type b, pneumococcal, poliovirus vaccines, diphtheria and tetanus toxoids, and pertussis adsorbed and acellular pertussis vaccines, but at different sites.

WARNING! SOME PEOPLE SHOULD CHECK WITH A DOCTOR BEFORE TAKING INFLUENZA VACCINE:

- Persons with an allergy to eggs that causes a dangerous reaction if they eat eggs and those who have had a serious reaction to previous influenza vaccination should consult a physician before receiving the vaccine.

- Anyone who has ever been paralyzed with Guillain-Barré syndrome should seek advice from their doctor about special risks that might exist in their cases.

- Women who are or might be pregnant should consult with their doctor.

- Persons who are ill and have a fever should ask their doctor whether or not they should delay vaccination until the fever and other temporary symptoms have gone.

QUESTIONS:

If you have any questions about influenza or influenza vaccination, please ask now or call your doctor before requesting the vaccine.

REACTIONS:

If anyone receiving influenza vaccine gets sick and visits a doctor, hospital, or clinic in the 4 weeks after vaccination, please report this to:

VACCINE ADMINISTRATION RECORD

The doctor or clinic may keep this record in your medical file or your child's medical file. They will record what vaccine was given, when the vaccine was given, the name of the company that made the vaccine, the vaccine's special lot number, the signature and title of the person who gave the vaccine, and the address where the vaccine was given.

"I have read or have had explained to me the information in this pamphlet about influenza and influenza vaccine. I have had a chance to ask questions that were answered to my satisfaction. I believe I understand the benefits and risks of influenza vaccine and ask that the vaccine be given to me or to the person named below for whom I am authorized to make this request."

Information about person to receive vaccine (Please print.)					
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Influenza 8/1/93

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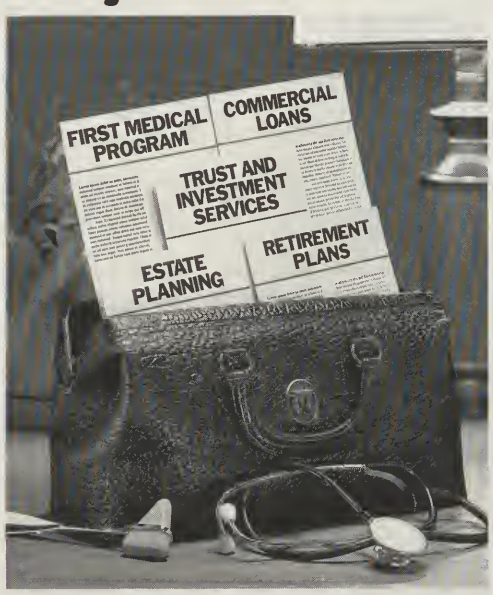
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Chief Executive Officer's Newsletter

November 1993

1993-1994 Med Chi Membership Directory

The *1993-1994 Med Chi Membership Directory* was mailed to all active Med Chi members with this November 1993 issue of the *Maryland Medical Journal*. If your membership status is emeritus, emeritus-at-large, affiliate, associate, student, or resident, you can request a free copy of the directory by calling Wanda Griebel at 410-539-0872 or 1-800-492-1056. The directory is available to non-Med Chi members for $250 plus postage.

IRS Issues Guidance on Nondeductible Lobbying Expenses

From the American Society of Association Executives (ASAE) Government Affairs department. The Internal Revenue Service (IRS) issued guidance (IR-93-98) to associations on how to treat dues that an association **assesses or receives before 1994** that are allocable to nondeductible lobbying and political expenditures. The IRS also issued transition rules (Notice 93-55) that will appear in the *Internal Revenue Bulletin* 1993-35, dated November 8, 1993.

The transition rules offer three options for an association. You may (1) provide your members with notices setting forth a reasonable estimate of the portion of the dues that are not deductible; (2) pay the proxy tax on the amount of dues actually allocable at the highest corporate rate—35% (the timing and method for this payment has not yet been determined); or (3) increase your "reasonable estimate" of dues allocable to nondeductible lobbying and political expenditures for 1995 by the amount of the actual 1994 expenditures.

Following a meeting with IRS and treasury department officials, Edward T. Coleman, Esq., of Webster, Chamberlain & Bean, and the ASAE Task Force on Lobbying Tax Regulations chairperson, said, "an association with a noncalendar fiscal year that includes part of 1994 must comply **now** with the recently enacted law affecting the nondeductibility of lobbying expenses."

There are many unanswered questions and concerns. Watch for the temporary regulation that the IRS will be issuing in the next few months.

New Medicare Policy

For services rendered on or after October 30, 1993, the physician can bill the patient for noncovered visit services provided as part of a routine physical examination. The physician should use the preventive medicine service codes (99381–99379) to report these services. Also, the physician may continue to bill the patient for noncovered procedures (e.g., routine chest x-ray).

For covered visit services, the physician bills Medicare; payment is the lesser of the physician's actual charge or the Medicare approved amount if the physician accepts assignment. If the physician does not accept assignment, payment is the lesser of the physician's actual charge or the physician's limiting charge. The physician's charge to the patient for the noncovered portion of the E&M (evaluation and management) service is the difference between the physician's usual fee for a routine physical exam and his/her **usual** fee (not the allowed amount) for the covered visit.

The physician is not required to notify the patient in advance that the physical exam is a noncovered service because the basis of the noncoverage is a specific statutory exclusion.

Medicare Update

Effective January 1, 1994, EKG (electrocardiogram) interpretations performed in conjunction with visits will be reimbursed by Medicare, and the new physician reductions in reimbursement will be abolished.

Blue Cross/Blue Shield of Maryland Medicare Update

Mammograms. When referring patients for mammograms, document on the requisition form whether it is screening or diagnostic and unilateral or bilateral. During 1992, Maryland Medicare's billing for diagnostic mammograms was 9% higher than the national average.

Assignment decisions. The HCFA 1500 claim form is a legal document and cannot be changed or canceled by the provider after the claim is processed and both parties (physician processed and beneficiary) have been notified.

Waiver of liability. This waiver must be given to patients when services may be denied as "not medically necessary," and it must be specific to the service being provided, be signed by the patient prior to the service, and a copy must be given to the patient.

Electronic billing. Medicare provides free software for billing Medicare claims. Call 410-561-4277 for more information.

Flu shots. Flu shots are covered as of May 1, 1993. Bill 90724 and Q0124 for flu shot and administration. The allowance is $3.38 for 90724 and $2.67 for Q0124.

Effective October 1, 1993, interest will not be paid until the 31st day on clean claims.

Effective January 1, 1994, separate payment will be made for the interpretation of EKGs (electrocardiograms), and the new physician and practitioner limits will not apply for 1994 services.

Revised payments to anesthesia teams. The allowance for the team (physician and CRNA [certified register nurse anesthesist] or AA [anesthesist assistant]) will not exceed 125% of the allowance for a personally performed service. The allowance will be decreased 5% each year until 1998 when the payment will be the same for a team or an individual anesthesiologist.

The 1994 version of ICD-9-CM diagnosis codes must be used by all providers for claims received January 1, 1994, and after. Claims will be denied for incorrect diagnosis and diagnosis not brought out to the highest level of specificity.

The update factors for the 1994 medical fee schedule are: 1.1010 surgery = 10%; 1.0540 nonsurgery = 5.3%; and 1.0080 primary care = 7.9%.

Self-Referral

Effective December 31, 1994, a physician cannot refer Medicaid/Medicare patients to entities providing the following services if the physician has a financial interest in the entity: clinical lab; radiology or other diagnostic lab; physical or occupational therapy; durable medical equipment; radiation therapy; parenteral/enteral nutrients; equipment and supplies; prosthetics, orthotics, or prostheses; home health; outpatient prescription drugs; and inpatient and outpatient health services. This prohibition does not apply to physicians who have their own in-office lab.

Lifetime Signature Authorization

A physician may obtain life-time signature authorizations from Medicare patients and submit subsequent claims on an assigned or unassigned basis by entering "Signature on File" in block 12 of the HCFA 1500 claim form.

For participating physicians who submit to Medicare, bills that automatically crossover and are paid by a Medigap carrier, life-time signature authorizations for assignment of Medigap benefits can be obtained if carrier specific. In order to inform Medicare that a patient has agreed to the assignment of Medigap benefits, "Signature on File" must be entered in block 13 of the HCFA 1500 claim form.

For any entry of "Signature on File," the patient or the patient's representative must sign and date an authorization statement.

Maryland Blue Cross/ Blue Shield—Medicare

Following this newsletter are revised medical policies expanding Medicare's coverage guidelines for epidural opiate analgesia and clarifying the policy on acute postsurgical intravenous patient-controlled analgesia. The policy on epidural opiate analgesia has been revised to allow one daily pain management hospital visit for up to four days immediately following the catheter placement.

Statewide Substance Abuse Education Program Initiated

On October 1, 1993, Med Chi, with support from the Governor's Drug and Alcohol Abuse Commission, initiated a statewide substance abuse education program. The program focuses on screening, counseling, and referring substance-abusing patients. It will be offered to Maryland's primary care physicians as both a continuing medical education course and in a self-study guide format. Courses are already being set up throughout the state. For more information about the program, or to schedule a presentation, please call Carmine M. Valente, Ph.D., at 410-539-0872 or 1-800-492-1056.

Physician Rehabilitation Committee Is Holding its Fourth Annual Conference on Addiction

The Fourth Annual Conference on Addiction is being held Saturday, December 11, 1993, at the Sheraton International Hotel BWI Airport from 7:30 a.m. to 6:00 p.m. Topics will include the biomedical aspects of addiction, nicotine addiction, the nature and present status of drug abuse treatment, the need for greater access to treatment, the future of drug control policy in America, helping the helpers, and use and abuse of heroin and other opioids.

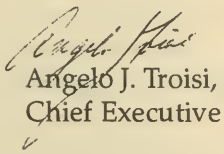
Registration fees are $60, Med Chi members; $100, nonmember physicians/Ph.D.; $40, allied health professionals; and no charge for medical students or medical residents. (Fee includes buffet lunch.) For additional information, see page 1137 of this *Maryland Medical Journal,* or call 410-962-5580 or 1-800-992-7010.

Study Group for Alternative Medicine

"Alternative Medicine in an Academic Hospital Setting" will be the topic of a talk by Brian Berman, M.D., at the second meeting of Med Chi's Study Group for Alternative Medicine. Dr. Berman is assistant professor of anesthesiology and family medicine at the University of Maryland Medical Center and director of the Laing–University of Maryland at Baltimore Complementary Medicine Project. The meeting will be held at Med Chi on January 19, 1994, at 7:00 p.m. Please call Steve Jones at Med Chi at 410-539-0872 or 1-800-492-1056 or Hiroshi Nakazawa, M.D., at 410-644-1502 if you wish to attend or receive additional information.

1994 Med Chi Annual Meeting

Plan to attend the 1994 Med Chi Annual Meeting being held Thursday, May 12 through Saturday, May 14, 1994, at the Ramada Inn and Convention Center in Hagerstown, Maryland. The theme of the meeting is "Medicine Under Health System Reform—Impact on Patients and Physicians." Watch the *Chief Executive Officer's Newsletter* for more information.



Angelo J. Troisi, F.A.C.H.E.
Chief Executive Officer

What is the status of the Comprehensive Standard Health Benefit Plan mandated by the Maryland Health Care and Insurance Reform Act of 1993 (HB 1359)?

On November 4, 1993, the Standard Benefit Task Force of the Health Care Access and Cost Commission (HCACC) presented the HCACC with the task force's report on the proposed standard benefits plan for Maryland small employers. In developing the standard benefit plan, the task force was required to set the total value of the plan's benefits between a statutory floor and ceiling.

The plan's floor was established by HB 1359 as the actuarial value of mandatory benefits for federally qualified health maintenance organizations (HMOs). According to estimates by the task force's actuarial consultant, A. Foster-Higgins & Co., Inc., the actuarial value was set at $2,997. The plan's ceiling, as established by HB 1359, could not exceed 12% of the average annual wage in Maryland, which was estimated to be approximately $3,500 for the calendar year ending December 31, 1994. However, the task force subsequently lowered the plan's ceiling to $3,078, ostensibly to allow the plan's rates to stay in effect for a three-year period during which annual medical inflation was projected to be 11.2% and wages were projected to increase only 4% annually.

The task force's report contains four different delivery systems—indemnity, preferred provider organization, point-of-service, and health maintenance organization— through which the proposed standard benefits plan can be provided. Although the health services offered are identical, the deductibles and co-payments of the standard benefits package is significantly different for each delivery system. Insurance carriers that offer insurance to small employers (2-50 employees) must offer the standard benefit plan beginning July 1, 1994; however carriers will **not be required** to offer every type of delivery system.

Through a letter dated November 4 and oral testimony presented to the full HCACC on Friday, November 19, 1993, Med Chi expressed its concern regarding the methodology used in pricing the plan and about benefits excluded from the plan. For the November 19 HCACC hearing, Med Chi organized a panel that included Med Chi, the Johns Hopkins University School of Medicine, the Johns Hopkins Health System, the University of Maryland School of Medicine, and Blue Cross and Blue Shield of Maryland to present common views to the HCACC. Although these parties did not agree on all things, they agreed on certain things and several HCACC members commented favorably on the presentation.

On December 2, 1993, the HCACC gave preliminary approval to a revised standard benefit plan which incorporated several changes proposed by Med Chi. The HCACC is expected to give final approval to the plan after a 45-day public comment period early next year. Med Chi's positions on the original proposed standard benefits package with the HCACC's responses are outlined below.

Organ transplants. The task force's report recommended that many organ transplants (e.g., heart, heart/lung, adult liver, autologous bone marrow) should be excluded. Med Chi objected to these exclusions, and **the HCACC agreed to provide full coverage for these transplants.**

Mammography screening. The task force's report recommended that screening mammography for women begin at age 50 and then occur subse-

quently every two years. Med Chi objected to the frequency of mammography after age 50 and to the exclusion of the 40 to 50 age group. **The HCACC agreed with Med Chi, and the plan will include screening mammographies for women between 40 and 50 (every two years) and for women over 50 (every year).**

Emergency services. The task force's report proposed a $50.00 co-pay for each emergency room visit. Moreover, this $50.00 did not count against any deductible. Med Chi and the Maryland Chapter of the American College of Emergency Physicians protested this fee and the fact that it would not be deductible. **The HCACC reduced the co-pay to $35.00 and determined that any payment would be applied against the deductible.**

Mental health coverage. Med Chi joined the Maryland Psychiatric Society and the Washington Psychiatric Society in suggesting that the 20-day limit on inpatient psychiatric care be increased to 30 days. **The HCACC increased the number of inpatient days to 25.**

Inpatient diagnostic testing. The task force's report excluded all inpatient diagnostic testing from coverage. Med Chi objected to this exclusion and cited procedures such as cardiac catherization that are routinely done in a hospital setting. **The HCACC responded by including inpatient diagnostic testing in the plan, subject to prior approval.**

Out-of-pocket limits. Med Chi expressed concern that the co-payments and deductibles under the non-HMO plans were too high and, therefore, would be unattractive to insurance companies and consumers alike. **The HCACC responded by setting the same out-of-pocket limits for the point of service plan (POS) and the preferred provider organization plan (PPO), thus relieving some of this concern.**

Med Chi is gratified by the HCACC's response to its public testimony and believes that its concerns have been accommodated.

Has the HCACC finalized any regulations regarding the provision in HB 1359 governing laboratory fees?

To date, the HCACC has not begun work on regulations governing laboratory fees, nor has there been any clarification regarding the "nominal fee" that physicians are permitted to add to a commercial laboratory's fee when the physician bills for the lab test. However, since 1973, *Health Occupations Article*, Maryland Code, section 14-404 (a) (16), provides explicit regulations about physicians' charges for lab tests. This law states that "a physician can be disciplined if a physician does not disclose on a bill to a patient or third party payer the name of the lab, the amount paid to the lab for the test or test series, and the amount of procurement or processing charge of the licensed physician for each specimen taken."

A more through discussion of the regulations and ethics concerning laboratory fees will be presented in the December *MMJ*.

Do you have a question regarding health system reform? Call Med Chi's Health System Reform Hotline 1-800-209-9126. Questions will be answered in subsequent *MMJ* issues.

Call for Papers

The Medical & Chirurgical Faculty of Maryland

requests papers on the theme

Medicine Under Health System Reform--Impact on Patients and Physicians

for the

1994 Annual Meeting

at the

Ramada Inn and Convention Center, Hagerstown, Maryland Thursday - Saturday May 12 - May 14, 1994

Med Chi invites papers dealing with "Medicine Under Health System Reform--Impact on Patients and Physicians" for consideration by the Med Chi Committee on Scientific Activity.

For more information, call the Med Chi Office of Continuing Education at 410-539-0872 or 1-800-492-1056.

■ IMPORTANT ■ ■ IMPORTANT ■

Workers' Compensation: A physician survey

The members of the Med Chi Committee on Managed Care and Third-Party Liaison are interested in hearing from you regarding your experience with Workers' Compensation. If you did not have an opportunity to respond to this survey when it was published in the May 1993 MMJ, *please take a few minutes now to fill it out and send it back as soon as possible. Thank you.*

Please type or print ***clearly.***

---

1. In what type of medical setting do you practice? *(Check all that pertain.)*

   o Group o Solo o HMO o Other:_____

2. What is your specialty? *(Check all that pertain.)*

   o Family Practice o Internal Medicine
   o Orthopaedics o Surgery (subspecialty):_____
   o General Practiceo Neurology
   o Other:_____

3. If you **accept** Workers' Compensation cases, what percentage of your practice consists of Workers' Compensation cases? _____% (Go to question 5.)

4. If you **do not** accept Workers' Compensation cases, please explain why. (Go to question 15.)

   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____

5. On average, how long does it take to get authorization to treat patients?_____

6. On average, how long does it take to get reimbursed for your services?_____

7. If you have had to file because of a denial, how long did it take to get an answer?_____

8. If you have billed according to the Workers' Compensation Commission fee schedule, have your bills been further reduced by the commissioner?

   ❑ YES ❑ NO

■ IMPORTANT ■ ■ IMPORTANT ■

Workers' Compensation: A physician survey

9. If you have had to call Workers' Compensation, have you had your calls answered in a timely manner?

❑ Always ❑ Most of the time ❑ Sometimes ❑ Rarely ❑ Never

10. During the last six months, what percentage of your patients have had treatments delayed more than two weeks because of delays in obtaining a second opinion or "an independent medical examiner"?_____%

11. What percentage of your patients who have used Workers' Compensation have been satisfied with the system? _____%

12. How often are your fees reduced below the Workers' Compensation Commission fee schedule? _____%

13. What do you think are the biggest problems with Workers' Compensation? _____

FOLD HERE

_____

_____

_____

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14. What do you think are the assets of Workers' Compensation? _____

_____

_____

_____

15. Any further comments you would like to make:_____

_____

_____

_____

Thank you for your cooperation. We will share the responses with you in a future issue of the *MMJ*.

Please fold on the line, seal with tape, and stamp.

FOLD HERE

_____

_____

_____

Rose M. Matricciani, R.N., J.D.
Chief Operating Officer
Med Chi
1211 Cathedral Street
Baltimore, MD 21201-5585

TAPE HERE

Medical Policy

SUBJECT: **EPIDURAL OPIATE ANALGESIA**

EFFECTIVE DATE: **August 1, 1989**

REVISED DATE: **November 9, 1992**

REVISED DATE: **October 1, 1993**

CPT/HCPCS Code(s): **62279, 01996**

Description of Service: Epidural Opiate Analgesia is a therapeutic modality for the treatment of post-operative pain. Narcotics provided in this manner produce long-lasting pain relief. The expected results include decreased morbidity and mortality as well as decreased length of stay associated with improved post-operative pain management. This type of analgesia includes patient - controlled epidural analgesia (PCEA).

Clinical Indications: The insertion of the epidural catheter is covered when it is not used as the method of anesthesia during a surgical procedure. (The insertion of the epidural catheter for the purpose of administering anesthesia at the time of surgery is included in the anesthesia fee.) Coverage for epidural opiate analgesia is limited to the following:

- major thoracic, vascular, abdominal and orthopedic surgeries,
- major trauma cases,
- patients at high risk for development of pneumonia or thrombophlebitis.

Billing Instructions: When the catheter is inserted on the same date as the administration of surgical anesthesia, the claim must state that the catheter was not used as the method of administering the anesthesia. In the absence of this

statement, presumption is made that the method of anesthesia was through the epidural catheter and no additional reimbursement is available.

The anesthesiologist responsible for placement of the epidural catheter will be reimbursed under procedure code 62279. Procedure code 01996 should be used to bill for daily management of the epidural analgesia on days subsequent to the day of insertion of the epidural catheter.

One daily pain management hospital visit (01996) for this continuous type of treatment will be allowed for up to four (4) days immediately following the epidural catheter insertion. The date of the catheter placement must be shown on the claim.

CRNA's may bill for the daily pain management hospital visits (01996).

Approved by: Barry S. Gold MD. F.ACP.
Barry S. Gold, M.D., F.A.C.P
Medical Director

Provider Notification:

- June, 1993 Medicare Report
- December, 1993 Medicare Report: Verbiage changes for clarification only.

epidural.ana

SECTION: Anesthesia

Medical Policy

SUBJECT:	**Acute Post-Surgical Intravenous (IV) Patient Controlled Analgesia (PCA)**
EFFECTIVE DATE:	**August 1, 1989**
REVISED DATE:	**November 9, 1992**
REVISED DATE:	**October 1, 1993**

CPT/HCPCS Code(s): **99251 - 99254, 99261 - 99263**

Description of Service: Intravenous (IV) Patient Controlled Analgesia (PCA) is an alternative to conventional post-operative pain control. It is a technique for post-operative pain management that involves self administration of intravenous drugs through an infusion pump.

Clinical Indications: When the anesthesiologist performs a consultative service evaluating and recommending appropriate dosage, lockout interval, and dose limits the service is included in the time units allowed for the anesthesia service. Under global surgery guidelines payment for physician services related to IV PCA is included in the global fee paid to the surgeon and is not separately reimbursed to an anesthesiologist.

Billing Instructions: There is no reimbursement to physicians for management of the patient controlled intravenous (IV) analgesia pump.

Approved by: Barry S. Gold MD. F.A.C.P.
Barry S. Gold, M.D., F.A.C.P
Medical Director

Provider Notification:

- December, 1993 Medicare Report: Verbiage added for clarification only.

ANNOUNCING

Med Chi's 1994 Annual Meeting

Medicine Under Health System Reform–
Impact on Patients and Physicians

Thursday, May 12 – Saturday, May 14, 1994
Ramada Inn & Convention Center
Hagerstown, Maryland

Keynote Speaker
Robert E. McAfee, M. D.
President-elect
American Medical Association

We Need A Doctor In The House

When the Maryland General Assembly convenes in Annapolis for its 1994 session, the Medical and Chirurgical Faculty will be there. Since 1964, Med Chi has staffed the first aid facility operated during the 90-day legislative session. Come join us at the state capitol building, and see the laws being made first hand. One doctor a day is all that is needed to care for the public, the legislators, and their staffs. Take advantage of the opportunity to donate something priceless, your time.

Please detach the postcard located at the top of this page, fill it out and mail it. A confirmation card will be sent to you explaining the details. You will be carrying on a tradition established by the medical community for the people of Maryland.

Doctor of the Day 1994



Note: All Monday dates are evening sessions, beginning at 4:00 p.m. and ending at 5:00 p.m. For more information, call Joyce Yensen at Med Chi's Legal Department, 410-539-0872 or call toll free in Md. at 1-800-492-1056.

Your time can make a difference.

Editorial

Gastroenteritis in nursing homes

The Maryland Department of Health and Mental Hygiene (DHMH) *Guidelines for Epidemiological Investigation of Gastroenteritis Outbreaks in Long-Term Facilities* defines an outbreak of gastroenteritis as "three or more residents from a single ward or unit or 3% or more of the entire facility who develop diarrhea or vomiting AND the onsets occur within a seven-day period." The *Code of Maryland Regulations,* 10.06.01.04, Reporting Procedures (for communicable diseases), states that nursing homes must report outbreaks "immediately by telephone to the health officer" and in writing to the health officer "within 48 hours."

Statistics from the DHMH Division of Outbreak Investigation show that there were 256 nursing home outbreaks of gastroenteritis reported in 21 jurisdictions in Maryland from 1988 through 1992 resulting in 8,364 cases of illness. Approximately 79% of these cases were nursing home residents and 21% were nursing home employees. A total of 105 people were hospitalized, and 26 died. In 78% of the outbreaks, the etiologic agent was listed as "undetermined, probably viral."

The number of hospitalizations and deaths from nonbacterial gastroenteritis can be reduced by taking preventive measures to control its spread. The importance of enteric precautions, especially wearing gloves and washing hands, cannot be overemphasized. Training sessions using videotapes or even simple verbal reminders to staff at their change of shift are beneficial during a gastroenteritis outbreak. Nursing home employees with diarrhea or vomiting should be excluded from patient care and food handling during acute illness and for two days after symptoms resolve.

Regulations and recommendations concerning bacterial enteric pathogens such as *Salmonella* and *Shigella* are covered in the *Code of Maryland*

Editorial

Regulations, 10.06.01 (communicable diseases), and in the DHMH *Guidelines for Epidemiological Investigation of Gastroenteritis Outbreaks in Long-Term Facilities,* available by calling 410-225-6677.

Details regarding a gastroenteritis outbreak in one nursing home are presented in an article by Emont et al beginning on page 1099.

MARILYN S. RADKE, M.D., M.P.H.
Waldorf, Maryland ■

Share your opinions

The Editorial Board of the *Maryland Medical Journal* encourages Med Chi members to share their opinions, beliefs, and convictions about all aspects of medicine. Letters to the Editor and essays for *Speak Out* should be sent to Editor, *Maryland Medical Journal,* 1211 Cathedral Street, Baltimore, MD 21201-5585.

THE UNION MEMORIAL CURTIS Hand Center

The Raymond M. Curtis Hand Center

is pleased to announce the opening of

The Congenital Hand Deformities Clinic

This clinic is staffed by Hand Specialists of The Union Memorial Hospital.

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Peter C. Innis, M.D.
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E. F. Shaw Wilgis, M.D.
Bruce S. Wolock, M.D.
Neal B. Zimmerman, M.D.

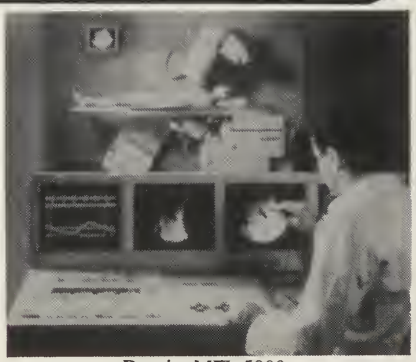
Patients are seen on the third Friday of each month beginning at 4:00 p.m.

You are welcome to attend with your patient if you so desire.

For Appointments Please Call:

The UMH Hand Associates Office
The Union Memorial Hospital
Professional Building, Suite 337
201 East University Parkway
Baltimore, Maryland 21218-2895
(410) 235-5405
FAX: (410) 467-5459

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For The Physician Members of Med Chi

For More Information Contact:
Physicians Practice Digest
410-539-3100

Discover The Elegance Of A Hybrid



At first glance, it's the ***beauty*** of a rose that catches the eye. The vibrant color. The delicately shaped petals. But study it more closely, and its ***elegance*** becomes apparent—a gentle blend of softness and strength.

At first glance, it's the ***enhanced performance*** of Vaseretic that catches the eye. But study Vaseretic more closely, and its ***elegance*** becomes apparent. The way its one-tablet, once-a-day dosage minimizes multiple medications. Minimizes insurance copayments. And minimizes potassium supplementation.

A hybrid ***blending of tolerability and power*** that's available for the right patient. Vaseretic is indicated for the treatment of hypertension in patients for whom combination therapy is appropriate.

And an elegant discovery for your practice.

USE IN PREGNANCY: When used in pregnancy during the second and third trimesters, ACE inhibitors can cause injury and even death to the developing fetus. When pregnancy is detected, Vaseretic® (Enalapril Maleate-Hydrochlorothiazide) should be discontinued as soon as possible. See WARNINGS, *Fetal/Neonatal Morbidity and Mortality.*

VASERETIC® 10-25 *Next*
Enalapril Maleate-Hydrochlorothiazide

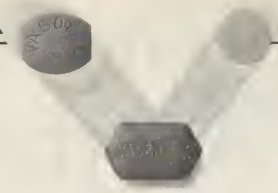
Dosage must be individualized; the fixed combination is not for initial therapy.

Evaluation of the hypertensive patient should always include assessment of renal function.

For a Brief Summary of Prescribing Information, see adjacent pages.

TABLETS
VASERETIC®
(ENALAPRIL MALEATE-HYDROCHLOROTHIAZIDE)

10 mg



25 mg

USE IN PREGNANCY: When used in pregnancy during the second and third trimesters, ACE inhibitors can cause injury and even death to the developing fetus. When pregnancy is detected, VASERETIC (Enalapril Maleate-Hydrochlorothiazide) should be discontinued as soon as possible. See WARNINGS, *Fetal/Neonatal Morbidity and Mortality.*

CONTRAINDICATIONS: VASERETIC is contraindicated in patients who are hypersensitive to any component of this product and in patients with a history of angioedema related to previous treatment with an angiotensin converting enzyme inhibitor. Because of the hydrochlorothiazide component, this product is contraindicated in patients with anuria or hypersensitivity to other sulfonamide-derived drugs.

WARNINGS: *General; Enalapril Maleate; Hypotension:* Excessive hypotension was rarely seen in uncomplicated hypertensive patients but is a possible consequence of enalapril use in severely salt/volume depleted persons such as those treated vigorously with diuretics or patients on dialysis.

Syncope has been reported in 1.3 percent of patients receiving VASERETIC. In patients receiving enalapril alone, the incidence of syncope is 0.5 percent. The overall incidence of syncope may be reduced by proper titration of the individual components. (See PRECAUTIONS, *Drug Interactions*, and ADVERSE REACTIONS.)

In patients with severe congestive heart failure, with or without associated renal insufficiency, excessive hypotension has been observed and may be associated with oliguria and/or progressive azotemia, and rarely with acute renal failure and/or death. Because of the potential fall in blood pressure in these patients, therapy should be started under very close medical supervision. Such patients should be followed closely for the first two weeks of treatment and whenever the dose of enalapril and/or diuretic is increased. Similar considerations may apply to patients with ischemic heart or cerebrovascular disease, in whom an excessive fall in blood pressure could result in a myocardial infarction or cerebrovascular accident.

If hypotension occurs, the patient should be placed in the supine position and, if necessary, receive an intravenous infusion of normal saline. A transient hypotensive response is not a contraindication to further doses, which usually can be given without difficulty once the blood pressure has increased after volume expansion.

Angioedema: Angioedema of the face, extremities, lips, tongue, glottis and/or larynx has been reported in patients treated with angiotensin converting enzyme inhibitors, including enalapril. In such cases VASERETIC should be promptly discontinued and appropriate therapy and monitoring should be provided until complete and sustained resolution of signs and symptoms has occurred. In instances where swelling has been confined to the face and lips the condition has generally resolved without treatment, although antihistamines have been useful in relieving symptoms. Angioedema associated with laryngeal edema may be fatal. **Where there is involvement of the tongue, glottis or larynx, likely to cause airway obstruction, appropriate therapy, e.g., subcutaneous epinephrine solution 1:1000 (0.3 mL to 0.5 mL) and/or measures necessary to ensure a patent airway, should be promptly provided.** (See ADVERSE REACTIONS.)

Patients with a history of angioedema unrelated to ACE inhibitor therapy may be at increased risk of angioedema while receiving an ACE inhibitor (see also CONTRAINDICATIONS).

Neutropenia/Agranulocytosis: Another angiotensin converting enzyme inhibitor, captopril, has been shown to cause agranulocytosis and bone marrow depression, rarely in uncomplicated patients but more frequently in patients with renal impairment especially if they also have a collagen vascular disease. Available data from clinical trials of enalapril are insufficient to show that enalapril does not cause agranulocytosis at similar rates. Marketing experience has revealed several cases of neutropenia or agranulocytosis in which a causal relationship to enalapril cannot be excluded. Periodic monitoring of white blood cell counts in patients with collagen vascular disease and renal disease should be considered.

Hydrochlorothiazide: Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. Cumulative effects of the drug may develop in patients with impaired renal function.

Thiazides should be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

Lithium generally should not be given with thiazides (see PRECAUTIONS, *Drug Interactions, Enalapril Maleate and Hydrochlorothiazide).*

Pregnancy; Enalapril-Hydrochlorothiazide: There was no teratogenicity in rats given up to 90 mg/kg/day of enalapril (150 times the maximum human dose) in combination with 10 mg/kg/day of hydrochlorothiazide (2 ½ times the maximum human dose) or in mice given up to 30 mg/kg/day of enalapril (50 times the maximum human dose) in combination with 10 mg/kg/day of hydrochlorothiazide (2 ½ times the maximum human dose). At these doses, fetotoxicity expressed as a decrease in average fetal weight occurred in both species. No fetotoxicity occurred at lower doses; 30/10 mg/kg/day of enalapril-hydrochlorothiazide in rats and 10/10 mg/kg/day of enalapril-hydrochlorothiazide in mice.

When used in pregnancy during the second and third trimesters, ACE inhibitors can cause injury and even death to the developing fetus. When pregnancy is detected, VASERETIC should be discontinued as soon as possible. (See *Enalapril Maleate, Fetal/Neonatal Morbidity and Mortality,* below.)

Enalapril Maleate; Fetal/Neonatal Morbidity and Mortality: ACE inhibitors can cause fetal and neonatal morbidity and death when administered to pregnant women. Several dozen cases have been reported in the world literature. When pregnancy is detected, ACE inhibitors should be discontinued as soon as possible.

The use of ACE inhibitors during the second and third trimesters of pregnancy has been associated with fetal and neonatal injury, including hypotension, neonatal skull hypoplasia, anuria, reversible or irreversible renal failure, and death. Oligohydramnios has also been reported, presumably resulting from decreased fetal renal function; oligohydramnios in this setting has been associated with fetal limb contractures, craniofacial deformation, and hypoplastic lung development. Prematurity, intrauterine growth retardation, and patent ductus arteriosus have also been reported, although it is not clear whether these occurrences were due to the ACE-inhibitor exposure.

These adverse effects do not appear to have resulted from intrauterine ACE-inhibitor exposure that has been limited to the first trimester. Mothers whose embryos and fetuses are exposed to ACE inhibitors only during the first trimester should be so informed. Nonetheless, when patients become pregnant, physicians should make every effort to discontinue the use of VASERETIC as soon as possible.

Rarely (probably less often than once in every thousand pregnancies), no alternative to ACE inhibitors will be found. In these rare cases, the mothers should be apprised of the potential hazards to their fetuses, and serial ultrasound examinations should be performed to assess the intraamniotic environment.

If oligohydramnios is observed, VASERETIC should be discontinued unless it is considered lifesaving for the mother. Contraction stress testing (CST), a non-stress test (NST), or biophysical profiling (BPP) may be appropriate, depending upon the week of pregnancy. Patients and physicians should be aware, however, that oligohydramnios may not appear until after the fetus has sustained irreversible injury.

Infants with histories of *in utero* exposure to ACE inhibitors should be closely observed for hypotension, oliguria, and hyperkalemia. If oliguria occurs, attention should be directed toward support of blood pressure and renal perfusion. Exchange transfusion or dialysis may be required as means of reversing hypotension and/or substituting for disordered renal function. Enalapril, which crosses the placenta, has been removed from neonatal circulation by peritoneal dialysis with some clinical benefit, and theoretically may be removed by exchange transfusion, although there is no experience with the latter procedure.

No teratogenic effects of enalapril were seen in studies of pregnant rats and rabbits. On a mg/kg basis, the doses used were up to 333 times (in rats), and 50 times (in rabbits) the maximum recommended human dose.

Hydrochlorothiazide; Teratogenic Effects: Reproduction studies in the rabbit, the mouse and the rat at doses up to 100 mg/kg/day (50 times the human dose) showed no evidence of external abnormalities of the fetus due to hydrochlorothiazide. Hydrochlorothiazide given in a two-litter study in rats at doses of 4 - 5. 6 mg/kg/day (approximately 1 - 2 times the usual daily human dose) did not impair fertility or produce birth abnormalities in the offspring. Thiazides cross the placental barrier and appear in cord blood.

Nonteratogenic Effects: These may include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

PRECAUTIONS: *General; Enalapril Maleate; Impaired Renal Function:* As a consequence of inhibiting the renin-angiotensin-aldosterone system, changes in renal function may be anticipated in susceptible individuals. In patients with severe congestive heart failure whose renal function may depend on the activity of the renin-angiotensin-aldosterone system, treatment with angiotensin converting enzyme inhibitors, including enalapril, may be associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death.

In clinical studies in hypertensive patients with unilateral or bilateral renal artery stenosis, increases in blood urea nitrogen and serum creatinine were observed in 20 percent of patients. These increases were almost always reversible upon discontinuation of enalapril and/or diuretic therapy. In such patients renal function should be monitored during the first few weeks of therapy.

Some patients with hypertension or heart failure with no apparent preexisting renal vascular disease have developed increases in blood urea and serum creatinine, usually minor and transient, especially when enalapril has been given concomitantly with a diuretic. This is more likely to occur in patients with pre-existing renal impairment. Dosage reduction of enalapril and/or discontinuation of the diuretic may be required.

Evaluation of the hypertensive patient should always include assessment of renal function.

Hemodialysis Patients: Anaphylactoid reactions have been reported in patients dialyzed with high-flux membranes (e.g., AN 69*) and treated concomitantly with an ACE inhibitor. In these patients consideration should be given to using a different type of dialysis membrane or a different class of antihypertensive agent.

Hyperkalemia: Elevated serum potassium (greater than 5.7 mEq/L) was observed in approximately one percent of hypertensive patients in clinical trials treated with enalapril alone. In most cases these were isolated values which resolved despite continued therapy, although hyperkalemia was a cause of discontinuation of therapy in 0.28 percent of hypertensive patients. Hyperkalemia was less frequent (approximately 0.1 percent) in patients treated with enalapril plus hydrochlorothiazide. Risk factors for the development of hyperkalemia include renal insufficiency, diabetes mellitus, and the concomitant use of potassium-sparing diuretics, potassium supplements and/or potassium-containing salt substitutes, which should be used cautiously, if at all, with enalapril. (See *Drug Interactions.)*

Cough: Cough has been reported with the use of ACE inhibitors. Characteristically, the cough is nonproductive, persistent and resolves after discontinuation of therapy. ACE inhibitor-induced cough should be considered as part of the differential diagnosis of cough.

Surgery/Anesthesia: In patients undergoing major surgery or during anesthesia with agents that produce hypotension, enalapril may block angiotensin II formation secondary to compensatory renin release. If hypotension occurs and is considered to be due to this mechanism, it can be corrected by volume expansion.

Hydrochlorothiazide: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals. All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance: hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Warning signs or symptoms of fluid and electrolyte imbalance, irrespective of cause, include dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, confusion, seizures, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present, or after prolonged therapy. Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Hypokalemia may cause cardiac arrhythmia and may also sensitize or exaggerate the response of the heart to the toxic effects of digitalis (e.g., increased ventricular irritability). Because enalapril reduces the production of aldosterone, concomitant therapy with enalapril attenuates the diuretic-induced potassium loss (see *Drug Interactions, Agents Increasing Serum Potassium).*

Although any chloride deficit is generally mild and usually does not require specific treatment except under extraordinary circumstances (as in liver disease or renal disease), chloride replacement may be required in the treatment of metabolic alkalosis.

Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

In diabetic patients dosage adjustments of insulin or oral hypoglycemic agents may be required. Hyperglycemia may occur with thiazide diuretics. Thus latent diabetes mellitus may become manifest during thiazide therapy.

The antihypertensive effects of the drug may be enhanced in the postsympathectomy patient.

If progressive renal impairment becomes evident consider withholding or discontinuing diuretic therapy.

Thiazides have been shown to increase the urinary excretion of magnesium; this may result in hypomagnesemia.

Thiazides may decrease urinary calcium excretion. Thiazides may cause intermittent and slight elevation of serum calcium in the absence of known disorders of calcium metabolism. Marked hypercalcemia may be evidence of hidden hyperparathyroidism. Thiazides should be discontinued before carrying out tests for parathyroid function.

Increases in cholesterol and triglyceride levels may be associated with thiazide diuretic therapy.

Information for Patients; Angioedema: Angioedema, including laryngeal edema, may occur especially following the first dose of enalapril. Patients should be so advised and told to report immediately any signs or symptoms suggesting angioedema (swelling of face, extremities, eyes, lips, tongue, difficulty in swallowing or breathing) and to take no more drug until they have consulted with the prescribing physician.

Hypotension: Patients should be cautioned to report lightheadedness especially during the first few days of therapy. If actual syncope occurs, the patients should be told to discontinue the drug until they have consulted with the prescribing physician.

All patients should be cautioned that excessive perspiration and dehydration may lead to an excessive fall in blood pressure because of reduction in fluid volume. Other causes of volume depletion such as vomiting or diarrhea may also lead to a fall in blood pressure; patients should be advised to consult with the physician.

Hyperkalemia: Patients should be told not to use salt substitutes containing potassium without consulting their physician.

Neutropenia: Patients should be told to report promptly any indication of infection (e.g., sore throat, fever) which may be a sign of neutropenia.

Pregnancy: Female patients of childbearing age should be told about the consequences of second- and third-trimester exposure to ACE inhibitors, and they should also be told that these consequences do not appear to have resulted from intrauterine ACE-inhibitor exposure that has been limited to the first trimester. These patients should be asked to report pregnancies to their physicians as soon as possible.

NOTE: As with many other drugs, certain advice to patients being treated with VASERETIC is warranted. This information is intended to aid in the safe and effective use of this medication. It is not a disclosure of all possible adverse or intended effects.

Drug Interactions; Enalapril Maleate; Hypotension—Patients on Diuretic Therapy: Patients on diuretics and especially those in whom diuretic therapy was recently instituted, may occasionally experience an excessive reduction of blood pressure after initiation of therapy with enalapril. The possibility of hypotensive effects with enalapril can be minimized by either discontinuing the diuretic or increasing the salt intake prior to initiation of treatment with enalapril. If it is necessary to continue the diuretic, provide medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS.)

Agents Causing Renin Release: The antihypertensive effect of enalapril is augmented by antihypertensive agents that cause renin release (e.g., diuretics).

Other Cardiovascular Agents: Enalapril has been used concomitantly with beta adrenergic-blocking agents, methyldopa, nitrates, calcium-blocking agents, hydralazine and prazosin without evidence of clinically significant adverse interactions.

Agents Increasing Serum Potassium: Enalapril attenuates diuretic-induced potassium loss. Potassium-sparing diuretics (e.g., spironolactone, triamterene, or amiloride), potassium supplements, or potassium-containing salt substitutes may lead to significant increases in serum potassium. Therefore, if concomitant use of these agents is indicated because of demonstrated hypokalemia they should be used with caution and with frequent monitoring of serum potassium.

Lithium: Lithium toxicity has been reported in patients receiving lithium concomitantly with drugs which cause elimination of sodium, including ACE inhibitors. A few cases of lithium toxicity have been reported in patients receiving concomitant enalapril and lithium and were reversible upon discontinuation of both drugs. It is recommended that serum lithium levels be monitored frequently if enalapril is administered concomitantly with lithium.

Hydrochlorothiazide; When administered concurrently the following drugs may interact with thiazide diuretics:

Alcohol, barbiturates, or narcotics—potentiation of orthostatic hypotension may occur.

Antidiabetic drugs (oral agents and insulin)—dosage adjustment of the antidiabetic drug may be required.

Other antihypertensive drugs—additive effect or potentiation.

Cholestyramine and colestipol resins—Absorption of hydrochlorothiazide is impaired in the presence of anionic exchange resins. Single doses of either cholestyramine or colestipol resins bind the hydrochlorothiazide and reduce its absorption from the gastrointestinal tract by up to 85 and 43 percent, respectively.

Corticosteroids, ACTH—intensified electrolyte depletion, particularly hypokalemia.

Pressor amines (e.g., norepinephrine)—possible decreased response to pressor amines but not sufficient to preclude their use.

Skeletal muscle relaxants, nondepolarizing (e.g., tubocurarine)—possible increased responsiveness to the muscle relaxant.

Lithium—should not generally be given with diuretics. Diuretic agents reduce the renal clearance of lithium and add a high risk of lithium toxicity. Refer to the package insert for lithium preparations before use of such preparations with VASERETIC.

Non-steroidal Anti-inflammatory Drugs—In some patients, the administration of a non-steroidal anti-inflammatory agent can reduce the diuretic, natriuretic, and antihypertensive effects of loop, potassium-sparing and thiazide diuretics. Therefore, when VASERETIC and non-steroidal anti-inflammatory agents are used concomitantly, the patient should be observed closely to determine if the desired effect of the diuretic is obtained.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Enalapril in combination with hydrochlorothiazide was not mutagenic in the Ames microbial mutagen test with or without metabolic activation. Enalapril-hydrochlorothiazide did not produce DNA single strand breaks in an *in vitro* alkaline elution assay in rat hepatocytes or chromosomal aberrations in an *in vivo* mouse

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bone marrow assay.

Enalapril Maleate: There was no evidence of a tumorigenic effect when enalapril was administered for 106 weeks to rats at doses up to 90 mg/kg/day (150 times* the maximum daily human dose). Enalapril has also been administered for 94 weeks to male and female mice at doses up to 90 and 180 mg/kg/day, respectively, (150 and 300 times* the maximum daily dose for humans) and showed no evidence of carcinogenicity.

Neither enalapril maleate nor the active diacid was mutagenic in the Ames microbial mutagen test with or without metabolic activation. Enalapril was also negative in the following genotoxicity studies: rec-assay, reverse mutation assay with *E. coli*, sister chromatid exchange with cultured mammalian cells, and the micronucleus test with mice, as well as in an *in vivo* cytogenic study using mouse bone marrow.

There were no adverse effects on reproductive performance in male and female rats treated with 10 to 90 mg/kg/day of enalapril.

Hydrochlorothiazide: Two-year feeding studies in mice and rats conducted under the auspices of the National Toxicology Program (NTP) uncovered no evidence of a carcinogenic potential of hydrochlorothiazide in female mice (at doses of up to approximately 600 mg/kg/day) or in male and female rats (at doses of up to approximately 100 mg/kg/day). The NTP, however, found equivocal evidence for hepatocarcinogenicity in male mice.

Hydrochlorothiazide was not genotoxic *in vitro* in the Ames mutagenicity assay of *Salmonella typhimurium* strains TA 98, TA 100, TA 1535, TA 1537, and TA 1538 and in the Chinese Hamster Ovary (CHO) test for chromosomal aberrations, or *in vivo* in assays using mouse germinal cell chromosomes, Chinese hamster bone marrow chromosomes, and the *Drosophila* sex-linked recessive lethal trait gene. Positive test results were obtained only in the *in vitro* CHO Sister Chromatid Exchange (clastogenicity) and in the Mouse Lymphoma Cell (mutagenicity) assays, using concentrations of hydrochlorothiazide from 43 to 1300 µg/mL, and in the *Aspergillus nidulans* non-disjunction assay at an unspecified concentration.

Hydrochlorothiazide had no adverse effects on the fertility of mice and rats of either sex in studies wherein these species were exposed, via their diet, to doses of up to 100 and 4 mg/kg, respectively, prior to conception and throughout gestation.

Pregnancy: Pregnancy Categories C (first trimester) *and D* (second and third trimesters). See WARNINGS, *Pregnancy, Enalapril Maleate, Fetal/Neonatal Morbidity and Mortality.*

Nursing Mothers: Enalapril and enalaprilat are detected in human milk in trace amounts. Thiazides do appear in human milk. Because of the potential for serious reactions in nursing infants from either drug, a decision should be made whether to discontinue nursing or to discontinue VASERETIC, taking into account the importance of the drug to the mother.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS: VASERETIC has been evaluated for safety in more than 1500 patients, including over 300 patients treated for one year or more. In clinical trials with VASERETIC no adverse experiences peculiar to this combination drug have been observed. Adverse experiences that have occurred, have been limited to those that have been previously reported with enalapril or hydrochlorothiazide.

The most frequent clinical adverse experiences in controlled trials were: dizziness (8.6 percent), headache (5.5 percent), fatigue (3.9 percent) and cough (3.5 percent). Adverse experiences occurring in greater than two percent of patients treated with VASERETIC in controlled clinical trials were: muscle cramps (2.7 percent), nausea (2.5 percent), asthenia (2.4 percent), orthostatic effects (2.3 percent), impotence (2.2 percent), and diarrhea (2.1 percent).

Clinical adverse experiences occurring in 0.5 to 2.0 percent of patients in controlled trials included: *Body As A Whole:* Syncope, chest pain, abdominal pain; *Cardiovascular:* Orthostatic hypotension, palpitation, tachycardia; *Digestive:* Vomiting, dyspepsia, constipation, flatulence, dry mouth; *Nervous/Psychiatric:* Insomnia, nervousness, paresthesia, somnolence, vertigo; *Skin:* Pruritus, rash; *Other:* Dyspnea, gout, back pain, arthralgia, diaphoresis, decreased libido, tinnitus, urinary tract infection.

Angioedema: Angioedema has been reported in patients receiving VASERETIC (0.6 percent). Angioedema associated with laryngeal edema may be fatal. If angioedema of the face, extremities, lips, tongue, glottis and/or larynx occurs, treatment with VASERETIC should be discontinued and appropriate therapy instituted immediately. (See WARNINGS.)

Hypotension: In clinical trials, adverse effects relating to hypotension occurred as follows: hypotension (0.9 percent), orthostatic hypotension (1.5 percent), other orthostatic effects (2.3 percent). In addition syncope occurred in 1.3 percent of patients. (See WARNINGS.)

Cough: See PRECAUTIONS, *Cough.*

Clinical Laboratory Test Findings: Serum Electrolytes: See PRECAUTIONS.

Creatinine, Blood Urea Nitrogen: In controlled clinical trials minor increases in blood urea nitrogen and serum creatinine, reversible upon discontinuation of therapy, were observed in about 0.6 percent of patients with essential hypertension treated with VASERETIC. More marked increases have been reported in other enalapril experience. Increases are more likely to occur in patients with renal artery stenosis. (See PRECAUTIONS.)

Serum Uric Acid, Glucose, Magnesium, and Calcium: See PRECAUTIONS.

Hemoglobin and Hematocrit: Small decreases in hemoglobin and hematocrit (mean decreases of approximately 0.3 g percent and 1.0 vol percent, respectively) occur frequently in hypertensive patients treated with VASERETIC but are rarely of clinical importance unless another cause of anemia coexists. In clinical trials, less than 0.1 percent of patients discontinued therapy due to anemia.

Liver Function Tests: Rarely, elevations of liver enzymes and/or serum bilirubin have occurred.

Other adverse reactions that have been reported with the individual components are listed below and, within each category, are in order of decreasing severity.

Enalapril Maleate—Enalapril has been evaluated for safety in more than 10,000 patients. In clinical trials adverse reactions which occurred with enalapril were also seen with VASERETIC. However, since enalapril has been marketed, the following adverse reactions have been reported: *Body As A Whole:* Anaphylactoid reactions (see PRECAUTIONS, *Hemodialysis Patients*); *Cardiovascular:* Cardiac arrest; myocardial infarction or cerebrovascular accident, possibly secondary to excessive hypotension in high risk patients (see WARNINGS, *Hypotension*); pulmonary embolism and infarction; pulmonary edema; rhythm disturbances including atrial tachycardia and bradycardia; atrial fibrillation; hypotension; angina pectoris; *Digestive:* Ileus, pancreatitis, hepatic failure, hepatitis (hepatocellular [proven on rechallenge] or cholestatic jaundice), melena, anorexia, glossitis, stomatitis, dry mouth; *Hematologic:* Rare cases of neutropenia, thrombocytopenia and bone marrow depression. Hemolytic anemia, including cases of hemolysis in patients with G-6-PD deficiency, has been reported; a causal relationship to enalapril has not been established. *Nervous System/Psychiatric:* Depression, confusion, ataxia, peripheral neuropathy (e.g., paresthesia, dysesthesia); *Urogenital:* Renal failure, oliguria, renal dysfunction (see PRECAUTIONS), flank pain, gynecomastia; *Respiratory:* Pulmonary infiltrates, bronchospasm, pneumonia, bronchitis, rhinorrhea, sore throat and hoarseness, asthma, upper respiratory infection; *Skin:* Exfoliative dermatitis, toxic epidermal necrolysis, Stevens-Johnson syndrome, herpes zoster, erythema multiforme, urticaria, pemphigus, alopecia, flushing, photosensitivity; *Special Senses:* Blurred vision, taste alteration, anosmia, conjunctivitis, dry eyes, tearing.

Miscellaneous: A symptom complex has been reported which may include a positive ANA, an elevated erythrocyte sedimentation rate, arthralgia/arthritis, myalgia/myositis, fever, serositis, vasculitis, leukocytosis, eosinophilia, photosensitivity, rash and other dermatologic manifestations.

Fetal/Neonatal Morbidity and Mortality: See WARNINGS, *Pregnancy, Enalapril Maleate, Fetal/Neonatal Morbidity and Mortality.*

Hydrochlorothiazide—Body as a Whole: Weakness; *Digestive:* Pancreatitis, jaundice (intrahepatic cholestatic jaundice), sialadenitis, cramping, gastric irritation, anorexia; *Hematologic:* Aplastic anemia, agranulocytosis, leukopenia, hemolytic anemia, thrombocytopenia; *Hypersensitivity:* Purpura, photosensitivity, urticaria, necrotizing angiitis (vasculitis and cutaneous vasculitis), fever, respiratory distress including pneumonitis and pulmonary edema, anaphylactic reactions; *Musculoskeletal:* Muscle spasm; *Nervous System/Psychiatric:* Restlessness; *Renal:* Renal failure, renal dysfunction, interstitial nephritis (see WARNINGS); *Skin:* Erythema multiforme including Stevens-Johnson syndrome, exfoliative dermatitis including toxic epidermal necrolysis, alopecia; *Special Senses:* Transient blurred vision, xanthopsia.

* Based on patient weight of 50 kg.

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LETTERS TO THE EDITOR

Like father, like son

The biography of Samuel Claggett Chew as reported by Woodward[1] highlights the contributions of an outstanding physician to Maryland medicine. He must have been imbued with a great love for medicine, as he was truly a son of his father, Samuel Chew.

Chew, *père,* was born in Calvert County but received his preliminary education in Saint Mary's County. He was awarded a bachelor of arts degree in 1825 and a master of arts in 1828, both from Princeton. He graduated in medicine from the University of Maryland in 1829.

Intimately connected with the Medical and Chirurgical Faculty, he served as the librarian from 1835 to 1841; treasurer from 1838 to 1839, orator in 1858, and vice president from 1859 to 1863. In addition, he was professor of materia medica from 1841 to 1852; dean, 1842 to 1844; and professor of practice, 1852 to 1863, all at the University of Maryland. Interestingly, his son was also dean at Maryland from 1874 to 1879.

Sons not infrequently follow in the footsteps of their fathers. The most famous father–son combination may have been John Adams and John Quincy Adams, who were presidents of the United States. Another political duo was the Tafts of Ohio with a president and a senator. Alexandre Dumas and his son of the same name were famous in the nineteenth-century French literary world. Medically, several names come to mind: Charles Horace Mayo and his son, Charles Worral; John M.T. Finney and his sons, John and George; and Isaac Ridgeway Trimble and his son, I. Ridgeway.

The founder group of the Medical and Chirurgical Faculty included 85 men of whom 17 (20%) had sons who became physicians. During the first century of its existence, the Faculty had 2,073 members, and 98 (4.7%) had sons as doctors.

The most well-known of the founder group was John Archer—the first medical graduate in America. Dr. Archer had 10 children, 4 of whom died in infancy. Of the six survivors, all sons, five elected medicine for a career and studied under their father. Unfortunately, one son died while a student. The other five sons completed their studies at the University of Pennsylvania. One of these doctors, Thomas, was also a founding member of the faculty.

JOSEPH M. MILLER, M.D.
Timonium, Maryland

Reference

1. Woodward TE. Samuel Claggett Chew: clinician and educator. *Md Med J* 1993; 42:490–92. ■

LETTERS TO THE EDITOR

A first for Med Chi 138 years ago

The enclosed bit of trivia came to light—at least for me—several weeks ago as I was researching the history of medicine in Baltimore, particularly public health practices.

The news was that the Medical and Chirurgical Faculty had been the first in America (June 8, 1855) to propose the substitution of the decimal weights and measures for those then in use.

"David Stewart, M.D., was a Baltimore City Council member, 1835–1837; school commissioner, 1836; drug inspector for the Port of Baltimore; member of the state Senate, 1840; founder and lecturer, Maryland Medical Institute, 1847; State Agricultural Society chemist; professor of chemistry and natural philosophy and vice president, St. Johns College, Annapolis, 1855–1862; and founder of the Maryland College of Pharmacy.... It was on his motion that the Medical and Chirurgical Faculty...was the first in America to propose the substitution of the decimal weights and measures for those in use." (Cordell EF. *The Medical Annals of Maryland*. Baltimore: Williams & Wilkins. 1903.)

An interesting first, considering how long we have taken to get even a few measurements in metric.

JOHN B. DeHOFF, M.D.
Cockeysville, Maryland ■

Memories of Edelin

The description of Toulouse-Lautrec (Miller JM, *Md Med J* 1993; 42: 675-76) recalled an elegist's description of William J. Edelin, M.D., a St. Mary's County physician who died about 1874.

Elegist "E. J. C." wrote, in part, that Edelin "...stood high in his profession if low in his boots...." (*The Medical Annals of Maryland.* Baltimore, Maryland: Williams & Wilkins. 1903. p. 389.)

JOHN B. DE HOFF, M.D.
Cockeysville, Maryland ■

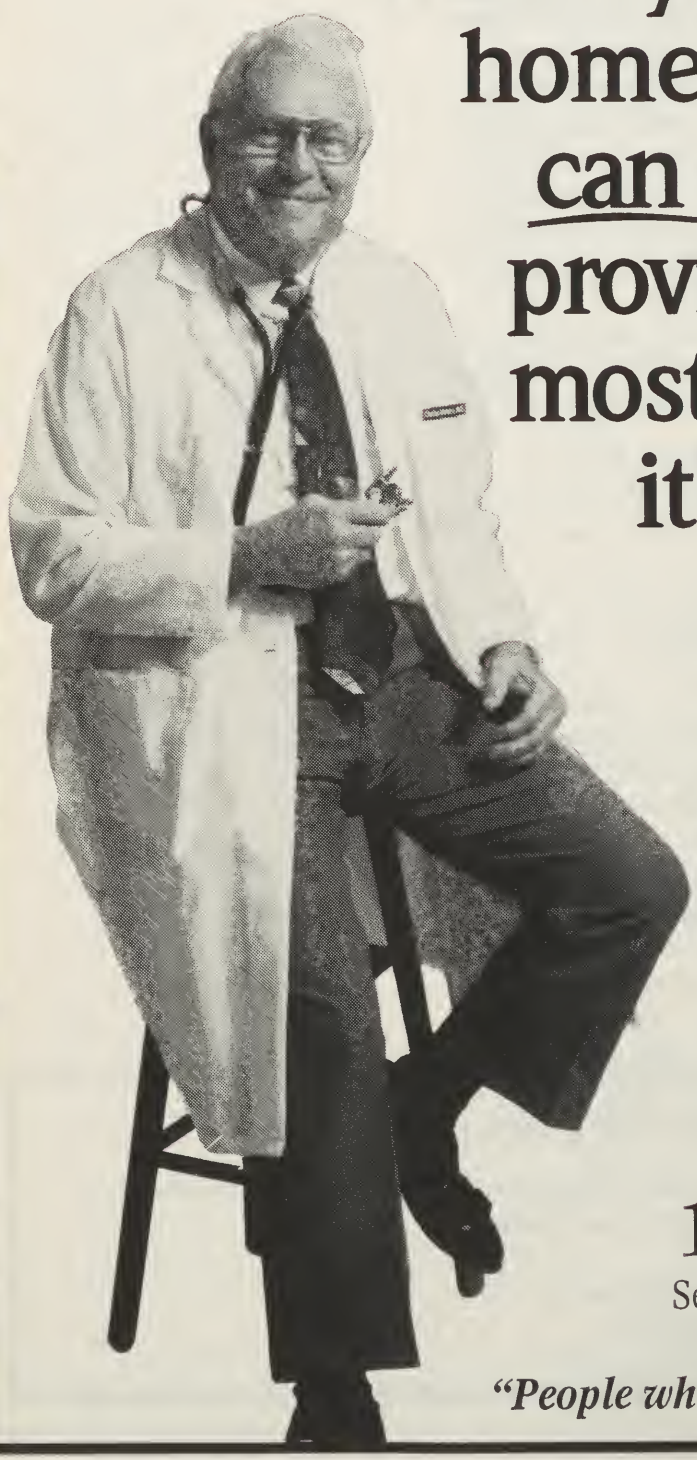
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Gastroenteritis outbreak in a Maryland nursing home

Seth L. Emont, Ph.D., M.S.; Timothy R. Coté, M.D., M.P.H.; Diane M. Dwyer, M.D.; and John M. Horan, M.D., M.P.H.

ABSTRACT: *From December 25, 1990, to January 12, 1991, an outbreak of acute viral gastroenteritis occurred among 132 residents and 102 employees of a Maryland nursing home. Illness typically lasted 24 hours and was characterized by diarrhea, vomiting, and fever. The attack rate was 46.2% (61/132) for residents and 42.2% (43/102) for employees. No differences in attack rates were observed by station in the facility. The risk of having an early case (before the peak of the outbreak on January 2, 1991) was 3.5 times greater for employees with patient contact than for employees without patient contact. Analyses of temporal and geographic clustering of cases suggest that person-to-person transmission was an important transmission mode. Although an etiologic agent was not identified, the short duration of illness, high rates of vomiting and diarrhea, and high attack rate are consistent with Norwalk-like viral infection.*

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The rate of gastrointestinal illness ranges from 1.5 to 1.9 illnesses per person per year in the United States.[1] Diarrheal illness is an important cause of death among young children and the elderly, particularly elderly persons living in institutions. Among 28,538 persons who died from diarrhea between 1979 and 1987, 51% were over 74 years of age, and 30% were living in nonhospital, patient-care settings.[2] Although gastroenteritis outbreaks occur year-round, most occur during the winter,[1] particularly among the elderly and young children.[2] Additionally, acute nonbacterial gastroenteritis outbreaks, such as those associated with Norwalk virus infection, have occurred year-round in various places, including schools, camps, cruise ships, restaurants, and communities.[3]

In Maryland, gastroenteritis outbreaks in nursing homes are reported each winter. Between October 1990 and May 1991, 27 reported outbreaks of gastroenteritis in nursing homes accounted for 830 cases among residents

Table 1. Resident case characteristics in a nursing home gastroenteritis outbreak, December 1990 to January 1991.

Characteristics	Number of cases	Attack rate (%)	Total resident population	Relative risk	95% confidence interval
Gender					
Male	13	38.2	34	ref	
Female	48	49.0	98	1.28	0.80, 2.05
Age in years					
≤76	11	27.5	40	ref	
77–86	23	47.9	48	1.74	0.97, 3.12
≥87	27	61.4	44	2.23	1.28, 3.89
Degree of ambulation					
Bedridden	1	25.0	4	ref	
Wheelchair	35	49.3	71	1.97	0.64, 32.71
Ambulatory	25	43.9	57	1.75	0.55, 29.26
Station					
1	26	45.6	57	ref	
2	35	46.7	75	1.02	0.70, 1.49

ref = reference group.

and employees, and more than one-third of these cases occurred during December and January. *Salmonella* and *Shigella* were ruled out as the etiologic agent in 21 of the 27 outbreaks (Maryland Department of Health and Mental Hygiene [DHMH], unpublished data, 1992).

On January 2, 1991, DHMH was notified about an outbreak of suspected viral gastroenteritis among staff and residents of a nursing home. The nursing home reported that approximately 69 residents and 21 employees were ill with symptoms of diarrhea and vomiting. The nursing home contacted the county health department and DHMH for control measure recommendations. A control plan was implemented by the nursing home, which included enteric precautions for ill residents, training in proper hand-washing technique, organizing staff and residents into cohorts, and prohibiting visitors from entering the building during the outbreak. When new cases continued to occur, DHMH initiated an investigation of the outbreak.

Background

The nursing home is a private, nonprofit, long-term care facility in a single building consisting of two stations, each divided into two wings. Station 1 consists of a north and south wing, and station 2 consists of an east and west wing. At the time of the outbreak, 132 residents shared 69 rooms; 57 rooms were double occupancy, 3 were triple occupancy, and 9 were single occupancy. None of the residents were tube fed. The health status of residents on the four wings was similar.

The nursing home employed 111 persons. About half of the employees were nurses (36%) or nurse assistants (15%); the remaining personnel (49%) were employed in dietary services, resident activities, administrative services, housekeeping, and maintenance. Administrative offices were located near the nursing home's front entrance. Nurses' offices were located in the center of each station. It was not unusual for nurses and other staff to rotate from one station to the other.

All resident activities were held in an activity room located between the two stations. Residents were given three meals each day in the dining area, also located between the stations. Thus, all residents shared dining and activity rooms.

Methods

Epidemiologic investigation. A case of gastroenteritis was defined as one or more episodes of diarrhea (two or more watery bowel movements in a 24-hour period), or at least one episode of vomiting from December 20, 1990, to January 13, 1991, in a nursing home employee or resident. Information on symptoms, type of diet, age, and sex of residents was abstracted from medical records and nurses' daily logs. To identify employees with gastroenteritis and to describe the employee population, questionnaires were distributed to all employees. Employees were also asked if they purchased their meals at the nursing home.

The risk of having gastroenteritis before the outbreak peaked on January 2, 1991 (an "early case"), was assessed among employee cases. To determine whether extent of patient care was associated with having an early case, employee cases were categorized as having either extensive, moderate, or no patient contact. Nurses and nurse assistants were categorized as having extensive patient contact; medical aides, administrative nurses, social workers, and activities coordinators as having moderate patient contact; and housekeepers, dietary workers, secretaries, administrators, resident services coordinators, and maintenance workers as having no patient contact.

Chi-square tests were used to assess the relationship for residents between age, sex, type of diet, and disease outcome. For the double-occupancy rooms, geographic clustering of cases was assessed using the Kolmogorov-Smirnov (K-S) test

as follows: the expected numbers of rooms with no persons ill, one person ill, or two persons ill were calculated by using the binomial distribution and compared with the observed numbers of rooms with no, one, or two persons ill. [4]

Incidence-density analysis [4] was used to determine whether temporal clustering of cases occurred among residents of double-occupancy rooms in which at least one case of illness occurred. Illness was examined as a function of exposure to a roommate who had become ill one or two days earlier. The total number of susceptible person-days for these residents was calculated from the day after the first case began (December 26, 1990) through the day the last case began (January 12, 1991). The total number of susceptible person-days was then divided into high-risk days (one or two days after the onset of illness in a roommate) and background-risk days (all other days during the outbreak).

Table 2. Employee case characteristics in a nursing home gastroenteritis outbreak, December 1990 to January 1991.

Characteristics	Number of cases	Attack rate (%)	Total employee population	Relative risk	95% confidence interval
Gender					
Male	1	25.0	4	ref	
Female	42	42.9	98	1.71	0.56, 28.42
Age in years					
≤35	13	31.7	41	ref	
36–45	12	42.9	28	1.35	0.73, 2.51
≥46	18	54.5	33	1.72	1.00, 2.97
Patient contact					
None*	15	41.7	36	ref	
Moderate/extensive**	28	44.4	63	1.07	0.66, 1.72

** Housekeepers, dietary workers, secretaries, administrators, resident services coordinator, and maintenance workers.*
***Nurse, nurse assistants, medical aides, administrative nurses, social workers, and activities coordinators.*
ref = reference group.

Laboratory investigation. Stool specimens from 17 acutely ill patients were tested for *Salmonella*, *Shigella*, and *Yersinia* at DHMH Annapolis Branch Laboratories. Stool samples from two acutely ill residents and one employee were collected within the first 48 hours of illness and sent to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases, Centers for Disease Control and Prevention (CDC), for examination of virus particles by immune electron microscopy. As specified by CDC guidelines,[5] 10 pairs of acute- and convalescent-phase serum samples were collected from ill residents and staff and tested by the same laboratory for antibodies against Norwalk agent and for reaction to particles found in the stool samples. Paired serum specimens were also obtained from 10 well persons.

Results

Information was collected for all residents and 102 (92%) of 111 employees. Demographic information for residents and employees with a case of gastroenteritis is presented in **Tables 1 and 2,** respectively. The overall attack rate was 44% (104 cases). The first case was recognized on December 25, 1990, when a resident of station 1 became ill. The outbreak peaked on January 2, 1991, at 26 cases and ended January 12, 1991, for a total outbreak period of 19 days (**Figures 1 and 2**).

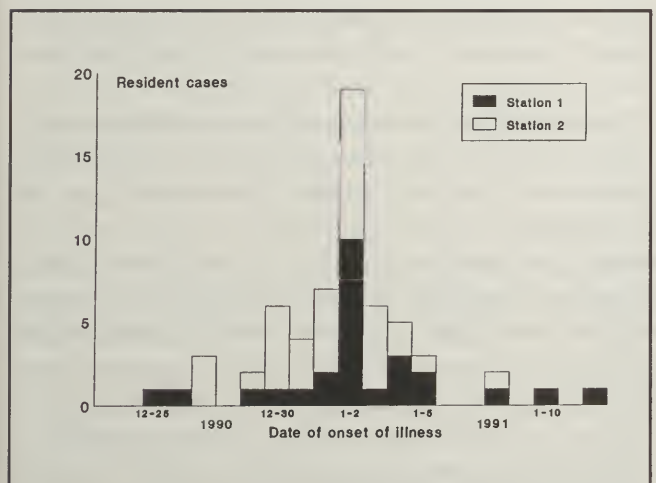


Figure 1. Number of resident cases of gastroenteritis (diarrhea or vomiting), by date of onset, in a Maryland nursing home, December 1990 to January 1991.

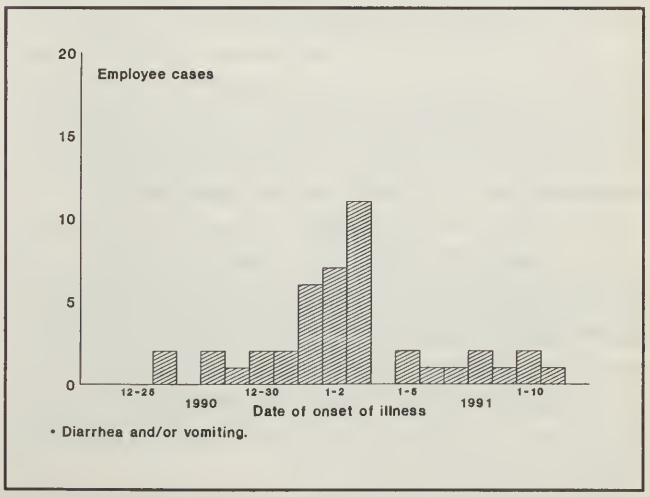


Figure 2. Number of employee cases of gastroenteritis (diarrhea or vomiting), by date of onset, in a Maryland nursing home, December 1990 to January 1991.

Table 3. Symptoms and duration of illness among resident and employee cases in a Maryland nursing home gastroenteritis outbreak, December 1990 to January 1991

Characteristics	Resident cases* (n=61)		Employee cases* (n=43)		Total* (n=104)	
	No.	%	No.	%	No.	%
Symptom						
Diarrhea	45	73.8	35	81.4	80	76.9
Vomiting	41	67.2	31	72.1	72	69.2
Fever	1	1.6	14	32.6**	15	14.4
Duration of illness (if known)						
Diarrhea						
1 day	31	91.2	23	65.7	54	78.3
≥ 2 days	3	8.8	12	34.3	15	21.7
Vomiting						
1 day	39	97.5	20	64.5	59	83.1
≥ 2 days	1	2.5	11	35.5	12	16.9
Fever						
1 day	1	100.0	8	57.1	9	60.0
≥ 2 days	0	0.0	6	42.9	6	40.0

*Percentage of case patients reporting symptom.
** Self-reported.

Residents. Ninety-eight (74%) residents were women and 34 (26%) were men. The mean age among residents was 79.9 years (range: 35 to 101). Only four (3%) residents were bedridden; 57 (43%) were ambulatory, and 71 (54%) used wheelchairs.

Illness was mild and typically lasted for 24 hours. No deaths and three hospitalizations occurred, but these hospitalizations may not have been related to the outbreak. The symptom most often reported was diarrhea (**Table 3**)—for 45 (74%) of 61 resident cases. For 34 case patients for whom duration of diarrhea was known, 31 (91%) reported one-day duration and three (9%) reported two- to nine-day duration. Vomiting was reported by 41 (67%) of 61 resident cases. For the 40 case patients for whom duration of vomiting was known, 39 (98%) reported one-day duration, and only one (3%) reported that vomiting lasted for two days. Fever was documented for only one resident case, and duration of fever was one day.

For residents, the overall attack rate was 46%. At the peak of the outbreak, 19 cases were reported in residents. No difference in attack rates was observed between the two stations (**Figure 1** and **Table 1**) or by degree of ambulation. The attack rate for bedridden residents (25%) was lower than that for wheelchair-bound (49%) or ambulatory residents (44%), but the differences among the three groups were not statistically significant ($\chi^2(2) = 1.12$; $p = .57$).

Forty-nine percent of women and 38% of men became ill ($\chi^2(2) = 0.78$; $p = .38$). Older residents were at significantly increased risk for illness (**Table 1.** $\chi^2(2) = 9.75$; $p < .01$).

Attack rates did not differ significantly by type of diet (i.e., regular, low salt, no concentrated sweets, calorie controlled, 1,200 calorie, or 1,500 calorie) or by the use of nutritional supplements (e.g., egg-nog or protein supplement).

Analysis of geographic clustering of resident-cases indicated that among the 57 double-occupancy rooms, the number of rooms with no persons ill, one person ill, or two persons ill was different from what would have been expected if the distribution of illness had been binomial (K-S test, $z = 3.0$, $p < .001$). Twenty-three rooms had no ill residents, 18 rooms had one ill resident, and 16 rooms had two ill residents.

Analysis of temporal clustering of cases indicated that, in the 34 rooms with at least two occupants and one case patient, the risk for a roommate becoming ill one or two days after the first case occurred in the room compared with becoming ill at any other time during the outbreak was 2.04 (95% confidence interval [CI], 0.88 to 4.21; incidence-density ratio = (9/67)/(47/713), two-tail test $p < .1$).

Employees. Ninety-eight (96%) employees were women and four (4%) were men. The mean age among employees was 40.6 years (range: 16 to 67 years). About 63% of employees were categorized as having patient contact. This group primarily consisted of health professionals and social activities staff (**Table 2**). The risk of having an early case was 3.5 times greater (95% CI, 0.9 to 13.4) for employees with patient contact than for employees with no patient contact (Fisher's exact test, two-tailed, $p < .05$).

Forty-three employees became ill for an overall attack rate of 42%. The first two employees to become ill (a nurse assistant from station 1 and a receptionist) had onset of illness on December 26. Most employee cases (n = 11) occurred on January 3. Resident-cases peaked on January 2, and a greater proportion of employee cases (49%) had onset after this date than did resident cases (30%). As with residents, no differences in attack rates were noted by sex. In addition, rates did not differ between employees who purchased meals at the nursing home and those who did not (50% vs 40%; $\chi^2 = 0.61$, $p = .44$).

Employee illness typically lasted for 24 hours. As with residents, the symptom most often reported was diarrhea—for 35 (81%) employee cases. Duration of diarrhea was one day for 23 employees (66%) and two to four days for 12 employees

(34%). Vomiting was reported by 31 (72%) employee cases. Duration of vomiting was one day for 20 (65%) employees and two to five days for 11 (36%) employees. Fever was reported by 14 (33%) employee cases; eight (57%) of those persons reported a one-day duration of fever, and six reported two- to eight-day duration.

Laboratory investigation. All 17 stool specimens were negative for *Salmonella*, *Shigella*, and *Yersinia*. A Norwalk-like agent was isolated from one of the three stool specimens tested at CDC. This particle, however, was not related to the present outbreak since it did not react with the convalescent-phase serum specimens. In addition, the assays of serologic response did not show a rise in antibody titer to the Norwalk agent.

Discussion

Although a specific etiologic agent was not isolated in this outbreak, the illness was consistent with that caused by a Norwalk-like virus. The high rates of vomiting and diarrhea, the short (one- to two-day) duration of illness, and the high attack rates are consistent with features of 81 outbreaks of acute nonbacterial gastroenteritis, 47% of which documented Norwalk virus infection.[3]

The original source of the outbreak could not be identified from the available information. The illness may have been introduced to the nursing home by visitors during Christmas week when many social activities, such as children's choirs, involved outside guests. Some residents left the nursing home for Christmas and may have been exposed to someone who was ill with the virus. The temporal and geographic clustering of resident cases and the attack rates for staff with patient contact suggest person-to-person transmission of illness once the virus was introduced to the nursing home.

The 44% attack rate at the nursing home was high. Although infection-control personnel at the nursing home reported having implemented control measures, when such measures began and how rigorously they were enforced are not clear. When the outbreak was reported, the local health department recommended that the nursing home follow DHMH guidelines for control of gastroenteritis outbreaks in long-term care facilities. These guidelines include assigning employees to cohorts of residents, stopping new nursing home admissions, limiting guest visitation, restricting ill residents from group activities until two days after illness resolution, training employees about proper cleaning of contaminated areas and laundry and proper hand-washing practices, and excluding symptomatic employees from patient care and food handling until two days after resolution of illness.

Sawyer and coworkers[6] suggested airborne virus transmission in a hospital outbreak of acute gastroenteritis. They hypothesized that the virus became airborne by contaminated laundry or explosive vomiting and diarrhea. Airborne virus transmission may have been involved in this outbreak, particularly since the nursing home has a closed environment.[7] Additionally, either airborne transmission or fomites could account for cases among employees who had no resident contact (e.g., secretaries).

Having over 40% of residents and staff ill over a two-week period creates enormous problems for a nursing home, including staff absenteeism at a time of increased staffing need. Prompt implementation of infection-control measures, such as hand washing after contact with every patient with diarrhea or vomiting until a noninfectious cause of illness is found, may limit the spread of infectious diarrheal agents. Patient care providers should wear disposable gloves when feces or fecally soiled articles or equipment are handled and should change their gloves once they have been contaminated.[7-8] Because of environmental factors that may increase disease transmission risk, such as a closed setting, close proximity of residents in living quarters, and elderly persons' increased susceptibility to illness, enforcement of infection-control measures should be routine in nursing homes.

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THE MARK OF EXCELLENCE

Oral cancer mortality in Maryland

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ABSTRACT: *Oral cancer mortality is one of the most preventable types of cancer deaths when the lesion is detected early. The survival rate is quite low, however, when oral cancer is diagnosed at an advanced stage. While the Maryland oral cancer incidence rate is lower than the US average, the state ranks fourth in the country for overall age-adjusted oral cancer mortality; Maryland's African-American population has the highest oral cavity and pharyngeal mortality rate. Delayed diagnosis may explain this occurrence since groups at high risk for developing oral cancer, such as the elderly and minority groups, do not have ready access to the Maryland oral health care system. As the elderly annually use physicians' services almost twice as much as they use dentists' services, physicians are encouraged to routinely complete an oral cavity and pharyngeal examination. Inclusion of oral health services into a Maryland health system reform benefits package would also improve routine screening frequency for oral cancer.*

Each year in the United States, more than 30,000 people are diagnosed with oral cancer, accounting for 4% of all cancers.[1-3] Like most cancers, oral cancer occurs in the older age segment of the population, with the majority of those diagnosed being 65 years of age and older.[2] While the incidence, or rate of new oral cancer cases has remained relatively constant in the general population, the incidence in African-American males appears to be increasing.[2] Although attracting little attention, oral cancer is more common than leukemia; melanoma; Hodgkin's disease; and cancer of the brain, liver, bone, thyroid gland, stomach, ovaries, or cervix.[1-2] Persons with oral cancer are also at an increased risk (8%–36%) for developing subsequent malignancies.[4-6] Squamous cell carcinoma is the most common type of oral and pharyngeal cancer, accounting for 90% of all oral malignancies.[3]

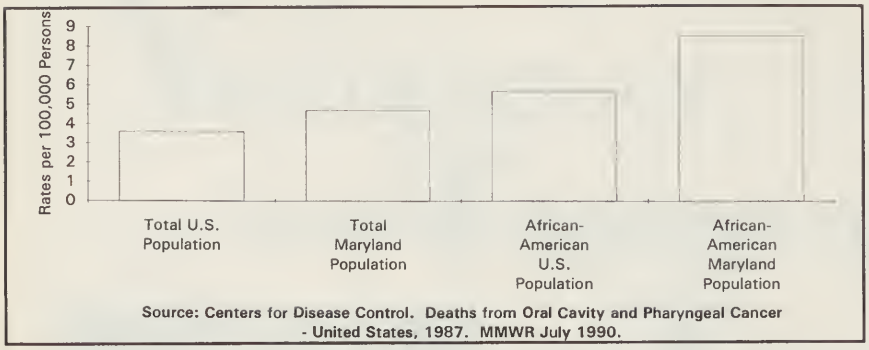


Figure 1. Oral cavity and pharyngeal cancer age-adjusted mortality (1987).

Tongue cancers are the single largest contributor to oral cavity cancer, accounting for almost 30% of these cancers.[2]

Each year in the United States, over 8,000 deaths are attributed to oral cancer.[2] The number of deaths resulting from oral cancer is likely to be masked by other, more conspicuous, comorbid conditions.[7] When detected early, the prognosis for oral malignancy is far better than for most cancers.[8] Oral cancers are often more readily accessible and capable of being diagnosed earlier than other cancers. Of the 13 major cancer sites, however, oral cancer has the fifth lowest five-year survival rate.[2] This relatively poor survival rate is associated with the fact that most oral cancer lesions are not diagnosed until they are relatively advanced.[9] Advanced lesions outnumbered localized lesions by more than two to one in the 12,425 cases recorded in the National Cancer Institute Surveillance, Epidemiology, and End Results (SEER) program.[4]

Not surprisingly, the oral cancer mortality rate is higher in groups with poor access to the oral health care system.[2,10] The oral cancer mortality rate for African-Americans, for example, is nearly twice as high as for their white peers.[2] Although a variety of factors are operative for all cancers and may account for the later stage at which oral cancers are diagnosed (e.g., lack of access to care and patient delay), the data suggest that the lack of early detection is a potential contributing factor.[11]

Concomitant with deaths from other cancers, Maryland has one of the highest rates of oral cancer mortality in the country.[12] This paper describes the disproportionately high oral cancer mortality rate in Maryland and discusses how the health care system can reduce these rates.

Table 1. Maryland counties' oral cavity, pharynx, and esophageal cancer death rate per 100,000, 1985-1987

County	Percent
Kent	35.46
Baltimore City	22.34
Caroline	20.57
Dorchester	20.08
Talbot	15.85
Somerset	15.50
Allegany	15.08
Wicomico	14.87
Worcester	14.82
Garrett	12.63
Queen Anne's	10.06
St. Mary's	9.87
Baltimore County	9.84
Prince George's	9.47
Charles	9.35
Montgomery	8.68
Anne Arundel	7.99
Harford	7.99
Cecil	7.93
Washington	7.82
Calvert	7.61
Frederick	5.80
Carroll	4.76
Howard	4.38

Source: Maryland Department of Health and Mental Hygiene

Oral cancer incidence and mortality rates

In 1990, Maryland ranked 27th in the United States in terms of its age-adjusted oral cancer incidence rate, ranking lower than the US average (11.6 vs 12.2 per 100,000 persons).[12] Unlike its incidence rate, however, Maryland's age-adjusted mortality rate far exceeded the national average in 1987 (4.7 vs 3.2 per 100,000 persons) and was fourth highest in the United States.[12] Maryland's high mortality rate may be attributed to its African-American population, which has the highest oral cavity and pharyngeal cancer mortality rate in the country, a rate that is 74% higher than the overall US African-American population rate (**Figure 1**).[12]

Table 1 lists the oral cancer mortality rate by Maryland county for 1985–1987.[13] This table includes cancer of the oral cavity, pharynx, and esophagus. All other references to oral cancer include cancer of the oral cavity and pharynx only. The state regions with the highest mortality rates are western Maryland, the Eastern Shore, and Baltimore City.

Although oral cancer occurs more frequently in males than females, the ratio of US men to women with oral cancer has dramatically decreased from 6:1 in 1950 to 2:1 in 1990.[6] One explanation for this reduction relates to the increase in smoking among women.[14]

Risk factors

The major oral cancer risk factors are the use of tobacco products (including smokeless tobacco) and alcohol consumption.[3] Although an estimated 30% of all cancer deaths are related to smoking, almost 75% of

oral cavity and pharyngeal cancers are attributed to tobacco use.[2] The combination of smoking and alcohol use demonstrate relative risks that are multiplicative and substantially greater than those for smoking or alcohol use alone. The association of tobacco and alcohol use with cancers of the oral cavity and pharynx appears to be dose-related.[15]

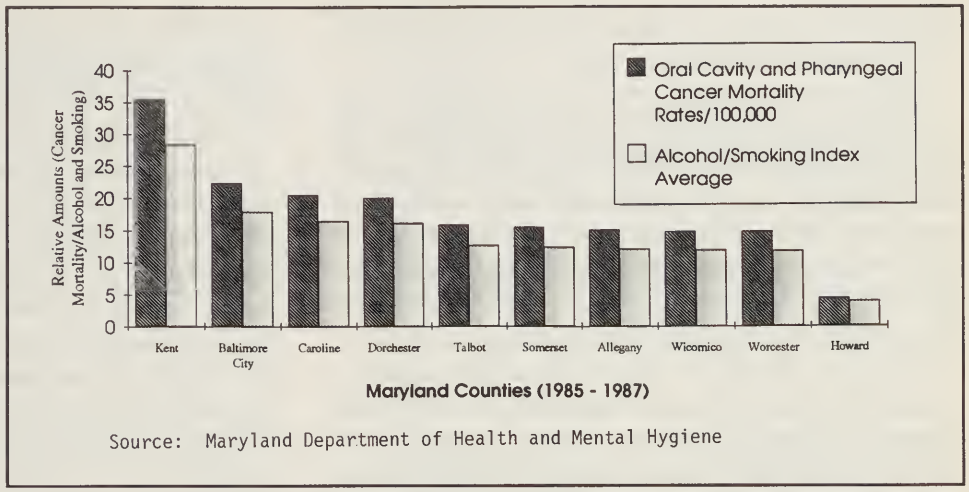


Figure 2. Oral cavity and pharyngeal cancer mortality compared with alcohol and smoking usage.

Figure 2 shows a corresponding relationship between smoking and alcohol usage for the Maryland counties with the highest rates of oral cancer mortality, as well as Howard County, which ranked last in oral cancer mortality.[13] The graph shows that the counties with the higher alcohol/smoking index averages have higher oral cancer mortality rates.

Other factors contributing to oral cancer risk include viral infections, immunodeficiencies, and occupational exposures,[16] with ultraviolet rays being a major cause of lip cancer.[17] These phenomena, however, do not completely account for Maryland's disproportionately high mortality rate and average incidence rate when compared with the US average. Considering the high survival rates associated with early oral cancer detection, a more plausible explanation may be delayed diagnosis.

Early detection and routine examination

Early detection of oral cancer has been shown to result in a marked reduction in mortality rates associated with the disease if the patient stops tobacco use. Studies have demonstrated that the percentage of people surviving five years after diagnosis corresponds to the cancer stage at the time of diagnosis. From 1974 to 1986, 38% of oral cavity and pharyngeal cancers were localized.[2] For oral cavity and pharyngeal cancer, the five-year survival rate was 75% for those with localized disease at diagnosis, compared with only 16% for those with metastases (**Figure 3**).[2] When compared with the white population, African-Americans had a statistically significant lower five-year survival rate (31.2% vs 53.4%) from oral cancer.[2]

Those individuals fortunate to survive metastatic oral cancer often experience a lengthy recovery time, pain, suffering, physical disfigurement, and concomitant psychological problems. Cancer treatment and its sequelae promote disorders, such as speech and hearing impairments, that can diminish the ability to resume occupational and social functions. Furthermore, oral cancer and its treatment can limit dietary and nutritional choices if there is a loss of salivary function and structures necessary for adequate mastication and swallowing.

The proportion of cancers detected at an earlier, more localized stage would perhaps increase if routine oral cancer screening was performed by **both** physicians and dentists. Oral cancer screening is a simple noninvasive procedure that can be accomplished routinely in less than two minutes.[18] The clinician should inspect extraoral and intraoral tissues for texture or color changes, bleeding, lesions, ulcerations, masses, and lymphadenopathy. Symptoms may include a sore or irritation in the mouth, dysphagia, bleeding, swelling of oral tissues, and numbness of the tongue or other areas of the mouth. The patient may also be asymptomatic. The most common oral carcinoma site is the tongue (29.2%), followed by the gingiva

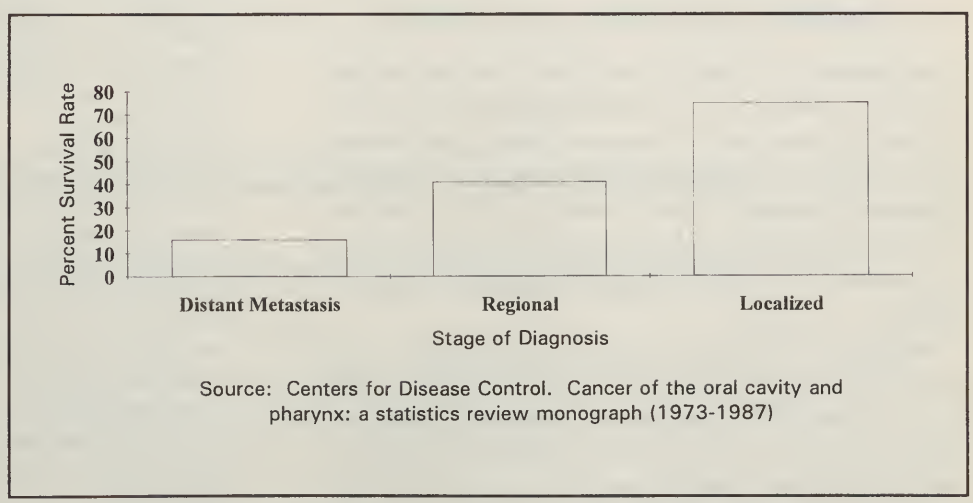


Figure 3. Oral and pharyngeal cancer five-year survival rates by stage of diagnosis (1973-1987).

and other mouth sites (25.2%), lip (17.4%), floor of the mouth (16.4%), and salivary glands (11.8%).[2]

Dentists **and** physicians have a unique opportunity to detect malignant neoplasia while it is asymptomatic, innocuous, and unsuspected. Physicians play a vital role in this process because older adults—the primary risk group for oral cancer—visit physicians almost twice as much as they do dentists. Over 80% of individuals 65 years and older visit a physician annually,[19] while only 42% visit a dentist.[20] The discrepancy in utilization rates is even more striking for low-income elderly groups.[19-20]

Both public and professional awareness of oral cancer are essential for reducing the time between onset of signs and symptoms and diagnosis. In a recent national health survey of more than 41,000 people, college-educated individuals did not consider regular alcohol consumption to be a risk factor for mouth cancer.[21] Most patients delay seeking professional advice for more than three months after becoming aware of an oral sign or symptom.[1] Patient delay in seeking consultation leads to potential extension and spread of the lesion.

A recent Maryland study found that most physicians do not conduct a routine oral cancer examination of their elderly patients and their knowledge of oral cancer is not current.[22] This may be attributable to the fact that many nondental health professionals have received minimal or no training in oral health, and oral cancer detection, education, and referral.

The US Public Health Service Healthy People 2000 initiative, the US Preventive Health Task Force, and the Maryland Governor's Plan for the Prevention of Heart Disease, Cancer, and Stroke recommend reducing oral cancer mortality through early diagnosis.[23-25] This can be accomplished through routine oral cancer examination of all persons by physicians and dentists, with particular attention to those individuals 65 years of age and older. Before an activity of this type and magnitude can realistically occur, however, targeted educational interventions for the various health professions need to be designed to modify behaviors and assure proficiency.

Availability and accessibility of dental services

Improvement in access to oral health care services for Maryland's socioeconomically disadvantaged elderly is needed to assure that patients receive routine oral cancer examinations, prompt diagnosis, prevention information, and, if needed, appropriate treatment or referral. Many older adults underuse oral health care services, in part, because of reduced income and a corresponding lack of public and private third-party financial support.[20]

Only 15% of the elderly—5.7% of the poor elderly—have dental insurance.[8] Medicare does not cover oral health care, and, in Maryland, Medicaid does not reimburse for adult oral health care services, including emergency care. As a result, the out-of-pocket share of dental expenditures for the elderly has been reported to be as high as 94%.[26]

The National Center for Health Statistics estimated that it annually costs $289 million to treat oral cavity and pharyngeal cancers.[27] Given that the current public support systems do not reimburse for the **preventive** oral health care services needed to screen for early signs of oral cancer, this system is then burdened to incur the expensive medical **treatment** costs. Under the new health system reform bill passed in Maryland, it would, therefore, be fiscally and philosophically prudent to include oral health benefits as part of the standard health insurance benefits package currently being developed by the Maryland Health Care Access and Cost Commission (HCACC). At a minimum, a thorough annual examination of the hard and soft tissues of the oral cavity and related structures needs to be included.

Conclusion

It has been projected that approximately 13% of the American population will be 65 years of age or older by the year 2000; this percentage could reach 21.8% by 2030.[28] This trend in population growth may portend a future increase in the number of new oral cancer cases, especially if high risk behaviors continue to be manifest in this population. With older adults visiting physicians much more frequently than dentists, primary care practitioners need to receive appropriate education and training to perform proficient oral cavity examinations as a part of their overall routine physical assessment.

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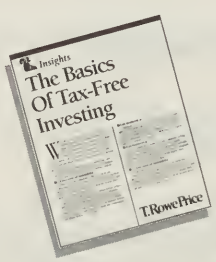
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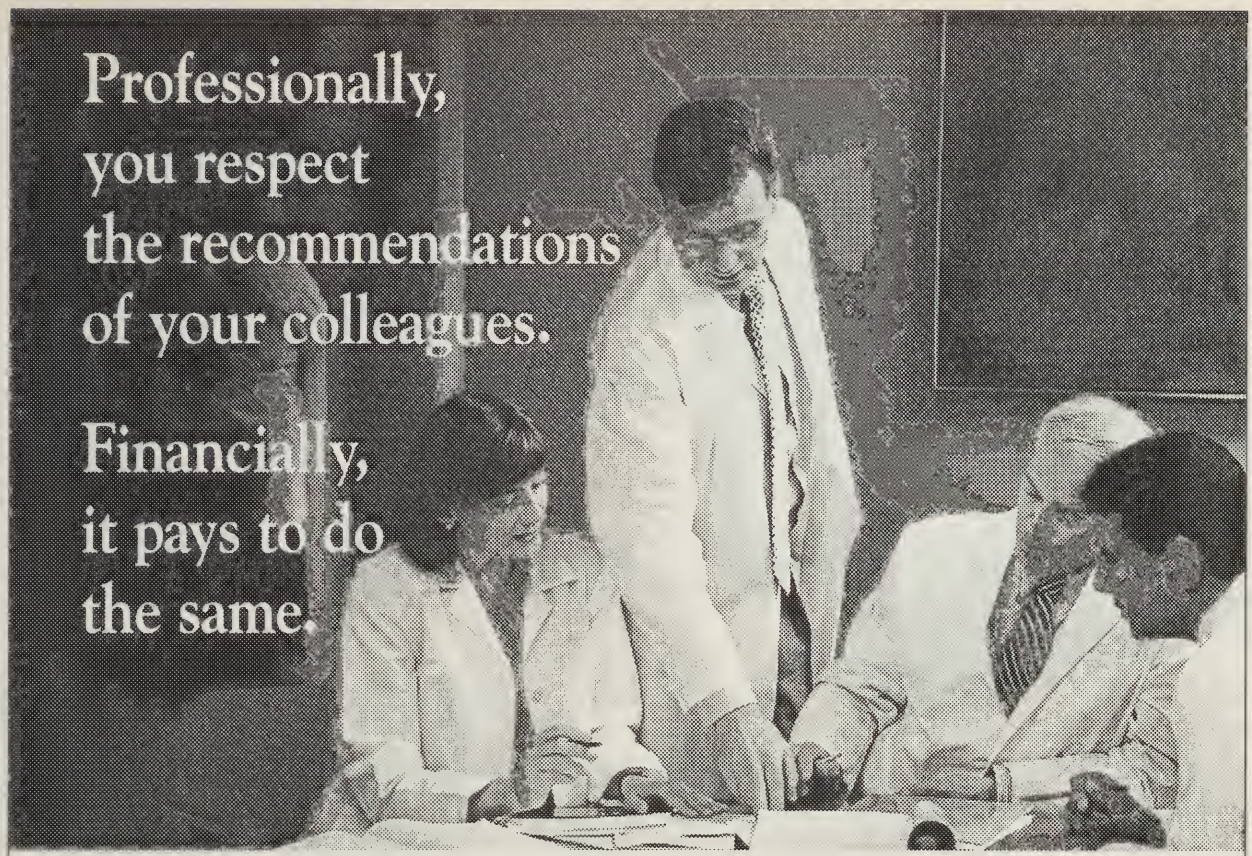


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Felty's syndrome: a case presentation

Piotr L. Grojec, M.D.; James H. Soliman, M.D.; and Calvin F. Fuhrmann, M.D.

From the Harbor Hospital Center where, at the time of the study, Dr. Grojec was a resident, Dr. Soliman was a junior resident, and Dr. Fuhrmann is chief, pulmonary division.

ABSTRACT: *A 64-year-old male patient with Felty's syndrome was treated with antibiotics, Plaquenil (hydroxychloroquine sulfate), and gold salts. In the fourth week of hospitalization, the patient died. Autopsy showed extensive bronchopneumonia, fibrous pleuritis, congestive splenomegaly, mild atherosclerosis, reactive lymphoid hyperplasia, congested passive liver, severe rheumatoid arthritis, and hypercellular bone marrow.*

The association of rheumatoid arthritis with splenomegaly and leukopenia, described in 1924 by Felty,[1] has become known as Felty's syndrome—a term first used in 1932 by Hanrahan and Miller.[2] The prevalence of Felty's syndrome is unknown, but it probably occurs in less than 1% of patients with rheumatoid arthritis.[3–4] Leukopenia is the result of a reduction in the neutrophils, which appears to be multifactorial in origin.[5] Other features seen in this syndrome include malaise, weight loss, frequent infections of all sorts (e.g., pneumonia, furunculosis, pyelonephritis), anemia, thrombocytopenia, skin hyperpigmentation, lymphadenopathy, pleuritis, neuropathy, episcleritis, Sjôgren's syndrome, and leg ulcers.[5–6]

Case presentation

FW was a 64-year-old male who complained of productive cough and generalized malaise for about six months prior to admission. Past medical history was significant for rheumatoid arthritis diagnosed six years previously, recurrent pneumonias, hypertension, cholecystectomy, and questionable kidney and liver disease. The patient was in his baseline state of health until six months prior to admission, when he began having productive cough associated with intermittent fever and chills but no hemoptysis. He also complained of increasing shortness of breath, generalized malaise, and, during the two months before hospitalization, of abdominal pain, tarry stools, loss of appetite, and weight loss.



Figure 1. Chest x-ray shows extensive consolidation within the left upper and lower lobes compatible with pneumonia.

The patient was married and lived with his wife. He had been a tobacco smoker, but had stopped smoking one year prior to admission. In the past, he had drunk alcohol heavily.

Physical examination noted a cachectic, acute, and chronically ill-appearing white male in moderate respiratory distress with a temperature of 100.6°F, regular pulse of 90/min, and respiratory rate of 40/min. The patient's skin was warm and dry with poor turgor and infected sebaceous cysts in the thoracic area and on the back. There were also multiple palpable nodules on both elbows and extensor surfaces of both forearms.

Mucous membranes were dry, sclerae slightly icteric, and conjunctivae pale. There was no lymphadenopathy. There was a II/VI systolic ejection heart murmur over the left parasternal border radiating to the left axilla and base of the neck. The lungs revealed decreased breath sounds more on the left side with basal crepitations bilaterally.

Abdomen was soft and nontender, and bowel sounds were present. Liver and spleen were enlarged. Guaiac test for occult blood in the stool was positive.

The joints showed deformities in all four extremities. There was an ulnar deviation at the wrist with swelling of proximal interphalangeal and metacarpophalangeal joints of both hands and feet.

Neurological examination revealed the patient to be alert and oriented to person and place but not to time. His speech was intact, but his memory was slow. There was marked muscle wasting, and muscle strength was decreased. He had no sensory deficits, and the deep tendon reflexes were intact.

Laboratory data revealed arterial blood gases with a pH of 7.468; pCo_2 (partial carbon dioxide pressure) of 35.1; pO_2 (oxygen partial pressure) of 47.5; HCO_3^- (bicarbonate) of 25.5; and O_2 (molecular oxygen) saturation 85.5 on 3 liters of O_2 administered by nasal canula. CBC (complete blood count) showed WBC (white blood cells), 2,200/cu mm; hematocrit, 22.8%; MCV (mean corpuscular volume), 77 fL; MCH (mean corpuscular hemoglobin), 23.5 pg; and RDW (red cell distribution width), 19%. There were 23% granulocytes or 0.5 x 10^3, and 69% lymphocytes. BUN (blood urea nitrogen) was 32 mg/dL; creatinine, 0.6 mg/dL; albumin, 2.5 g/dL; globulin, 4.6 g/L; alkaline phosphatase, 225 U/L; ALT (alanine aminotransferase), 58 U/L; Fe (iron), 36 µg/dL; Fe binding, 127 µg/dL; Fe saturation, 28.3%; erythropoietin, 43 mIU/ml; ferritin, 850 ng/ml; and haptoglobin, 76 mg/dL. The prothrombin time (PT) was 12.9 sec; the activated partial thromboplastin time (PTT), 35 sec; reticulocyte count, 2.5; and erythrocyte sedimentation rate, 45 mm/hr. The titer of rheumatoid factor was 1:20, and antinuclear antibody titer was less than 1:40. ECG (electrocardiogram) examination showed counter-clockwise rotation of the heart and P wave diphasic in lead II, III, and aVF.

The chest x-ray examination revealed extensive consolidation within the left upper and lower lobes compatible with pneumonia. No pleural effusion was seen. Underlying lung mass could not be excluded. There were no frank congestive changes. There was minimal infiltrate within the right midlung field. In addition, there was minimal volume loss to the left lung (**Figure 1**).

The patient was admitted to the intensive care unit and given intravenous antibiotics piperacillin and gentamicin. He also received multiple blood transfusions. An upper GI (gastrointestinal) series to evaluate for peptic ulcer or mass lesion was not conclusive. An EGD (esophagogastroduodenoscopy) was not done due to the patient's condition. Subsequent stool tests for occult blood, however, were negative. Liver and spleen isotope studies showed moderate to massive splenomegaly and moderate hepatomegaly compatible with diffuse liver disease.

Rheumatology consultation was obtained, and the impression was that the patient had Felty's syndrome. He was started on Plaquenil (hydroxychloroquine sulfate) and, later, on gold salts, and was continued on the previous antibiotic regimen.

Subsequent chest x-ray examinations, however, showed worsening of the right lung infiltrate with appearance of a right pleural effusion and pulmonary edema. The infiltrate/atelectasis in the left lung also persisted; an underlying neoplasm could not be excluded.

Bronchoscopy was done, revealing pneumonia and mucus plugging. Bone marrow biopsy showed decreased erythroid and myeloid precursors, but some maturation was still present. Megakaryocytes, plasma cells, and lymphoid type cells were

mildly increased. Iron stain showed marked reduction of stainable iron. Peripheral smears showed leukopenia with marked granulocytopenia. Platelets were also decreased. All cultures done in search of underlying pathogens were negative or inconclusive.

The patient had been receiving intravenous antibiotics for three weeks for continued leukopenia and low-grade fever. In the beginning of the fourth week of hospitalization, the patient became afebrile. He showed signs of clinical improvement, but was still neutropenic. Arrangements were made to transfer him to an extended care facility. The chest x-ray done on the day of his death showed some improvement in congestive heart failure; however, extensive infiltrate remained throughout the left lung. The same day, the patient suddenly developed a fever of 104.3°F, became confused and lethargic, and died.

Autopsy results showed: (1) extensive bronchopneumonia in the left upper and lower lobes with an abscess 3x2 cm in diameter in the left upper lobe; (2) extensive fibrous pleuritis on the left with fibrotic parietal pleura; (3) congestive splenomegaly (1.3 kg) with clinical signs of hypersplenism; (4) mild atherosclerosis of coronary arteries; (5) moderate left ventricular hypertrophy with mild biventricular dilatation; (6) reactive lymphoid hyperplasia in the hilar lymph nodes; (7) congested passive liver; (8) severe rheumatoid arthritis of all large and small joints; and (9) hypercellular bone marrow with mild myeloid hyperplasia.

Discussion

The presented patient fulfills the criteria for Felty's syndrome with regard to rheumatoid arthritis, splenomegaly, and neutropenia. In addition to the well-known triad, this patient had hepatomegaly, lymphadenopathy, weight loss, anemia, thrombocytopenia, and pulmonary manifestations with pleural thickening, effusion, and bronchopneumonia.

The natural history of Felty's syndrome is uncertain with respect to joint disease, extra-articular and hematological features, susceptibility to infection, and mortality. The condition is usually recognized in the fifth through seventh decades of life in patients who have had rheumatoid arthritis for 10 years or more.[7-8] Marked systemic involvement is characteristic of Felty's syndrome. The articular disease is usually more severe than in the average case of rheumatoid arthritis with greater deformity and erosion[9-10] and involvement of the small joints in the hands and feet, as well as large peripheral joints (e.g., knees, shoulders). The disease, however, can involve any joint of the body, and there are many examples of mild joint involvement.[11-12]

Patients with Felty's syndrome tend to have more extra-articular disease manifestations than those with rheumatoid arthritis.[9-11] Symptom frequency varies: 76% for rheumatoid nodules, 68% for weight loss, 34% for lymphadenopathy, 19% for pleuritis, and 84% for episcleritis.[6] Weight loss, leading to severe emaciation as in the case of our patient, was mentioned by Felty.[1] It often occurs for several months before the diagnosis of Felty's syndrome is made.

The splenic enlargement in Felty's syndrome is extremely variable, with weight ranging from 260 g to 2,420 g.[8,11,13,15] Our patient's spleen weighed 1,300 g. Splenomegaly appears to relate to the diffuse lymphoid hyperplasia seen commonly in rheumatoid arthritis.[16-17] There is no correlation between spleen size and degree of granulocytopenia.[4,8-10,18]

The mechanism of the leukopenia in Felty's syndrome remains controversial. There is a relative and absolute granulocytopenia, as in our patient, in contrast to systemic lupus erythematosus, in which lymphopenia is a more prominent feature. Postulated mechanisms include humoral factors,[19-21] increased neutrophil margination,[22-25] phagocytosis of neutrophils by the spleen,[26-27] and impaired production of granulocytes.[28-30]

Increased infection susceptibility persists in Felty's syndrome patients with and without splenectomy[9,10,11,15,25] and is probably related to several factors in addition to granulocytopenia (this suggests the importance of an intrinsic defect of granulocyte function and other normal defense mechanisms, that is, diminished granulocyte reserve,[26-27,31-32] defective phagocytosis,[23,26,33] chemotaxis,[34-35] and killing[36-37]).

Hypercellular bone marrow with myeloid hyperpiesia, which was noted in the presented case, is a fairly typical presentation in Felty's syndrome,[8-11] which may reflect an impaired myelopoietic response or early release of mature form. In some cases, the bone marrow may show no abnormalities.

Almost all Felty's syndrome patients are anemic, and our case is no exception; hypochromia is the rule. It represents the anemia characteristic of chronic disease, which may be due to failure of iron utilization with an additional component of shortened red blood cell survival, which is corrected by splenectomy.[38] Reticulocyte count elevation is common,[10] as was observed in our case. The platelet count is normal or somewhat reduced, in contrast to the thrombocytopenia seen in active rheumatoid synovitis.

Therapy for Felty's syndrome is a matter of controversy. Thrombocytopenia usually improves after splenectomy, as does anemia. The basic illness should be treated in the same manner as it would in the absence of Felty's syndrome. Frequently, granulocytopenia may improve during treatment with gold or D-penicillamine,[29,39-40] and high-dose parenteral testosterone[41] or lithium[42] may stimulate granulopoiesis and, in the case of the former drug, may also reduce the infection rate in a small number of patients. The use of low-dose oral methotrexate,[43-44] cyclophosphamide,[45] azathioprine,[46] as well as plasmapheresis[47] has also been advocated for Felty's syndrome patients. Recently, papers have been published reporting favorable response of granulocytopenia to treatment with low doses of cyclosporine A in patients with Felty's syn-

drome.[48-50] Further studies, however, are required to evaluate the long-term responses to this drug.

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Editor's note: See page 1135, *Word Rounds*, "What's a Felty?"



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Desquamative interstitial pneumonia: a case presentation

Minesh B. Patel, M.D.

Dr. Patel, at the time of this study, was a junior resident at Harbor Hospital Center, Baltimore, Maryland.

ABSTRACT: *A 25-year-old African-American woman presented in the emergency room of a community hospital complaining of shortness of breath. The patient was admitted with a diagnosis of atypical pneumonia. Her respiration worsened despite intravenous erythromycin, nebulized albuterol, 40% oxygen via ventimask, and guaifenesin. An open lung biopsy revealed pulmonary tissue showing interstitial fibrosis with lymphocytes and histiocytes scattered within the fibrous tissue. Numerous alveoli contained mononuclear cells as seen in desquamative interstitial pneumonia. The patient did not respond to methylprednisolone and died on the eighteenth hospital day.*

Desquamative interstitial pneumonia (DIP), originally described by Liebow et al,[1] is characterized by a marked increase in intra-alveolar mononuclear cells with minimal interstitial fibrosis. Although DIP etiology is not known, its histologic and radiographic differences, as well as its good response to steroid therapy, appear to warrant its separation from the interstitial pneumonia group and from certain conditions in which there is extensive accumulation of alveolar cells or mononuclear elements in the lungs.[1,2] This report reviews diagnosis and treatment options for this specific disease entity.

Case presentation

This was the first admission for this 25-year-old African-American woman, admitted with a chief complaint of shortness of breath. She had no significant past medical history. The patient was in her usual state of health until one month prior to admission, when she started having cough production of yellow sputum. She denied having any fever, chills, or shortness of breath at that time. Her cough continued, and one week prior



Figure 1. Chest x-ray shows patchy interstitial densities more prominent in the lung bases and bilateral hilar prominence.

to admission, she started having dyspnea on exertion and could only walk two blocks.

One day prior to admission, her dyspnea worsened, she started complaining of right-sided pleuritic chest pain, and she also had a fever. On the day of admission, she woke up feeling weak, became short of breath with mild exertion, and felt feverish. She thus presented to the emergency room of a community hospital for further evaluation.

She had no known allergies, worked as a security guard, had a five-year smoking history, drank alcoholic beverages occasionally, and denied illicit drug use. Family history was positive for diabetes.

Physical examination revealed a well-developed, well-nourished, African-American female in moderate respiratory distress. Her vital signs on admission were: blood pressure, 100/70 mm Hg; pulse rate, 88/min; respiratory rate, 30/min; and temperature, 99.3°F. There was no jugular venous distension. She had bibasilar inspiratory crackles. Heart and abdomen were within normal limits. There was no peripheral cyanosis or edema. She had clubbing of the fingers.

Admission laboratory data showed: glucose, 85 mg/dL; blood urea nitrogen, 5 mg/dL; sodium, 136 mEq/L; potassium, 4.6 mEq/L; chloride, 99 mEq/L; and carbon dioxide, 23 mEq/L. Complete blood count (CBC) revealed: hematocrit, 36%; white blood cells, 15,200/mm^3 with 80% granulocytes, 17% lymphocytes, 3% monocytes, and platelets, 458,000/mm^3.

Arterial blood gas (ABG) on room air showed: pH, 7.41; partial carbon dioxide pressure (pCo_2) 34.4; oxygen partial pressure (pO_2), 66.7; and bicarbonate (HCO_3^-), 22.1. Chest radiograph revealed patchy interstitial densities in both lungs, more prominent at bases and bilateral hilar prominence (**Figure 1**). Electrocardiogram was within normal limits.

Hospital course

The patient was admitted to a medical floor with a diagnosis of atypical pneumonia. A Gram stain of sputum showed many leukocytes, epithelial cells, and gram positive cocci in pairs. She was started on intravenous erythromycin and placed on oxygen via nasal canula at 4 liters per minute. A blood specimen for mycoplasma and legionella was sent for evaluation.

On the second hospital day, she felt better at rest; however, upon walking to the bathroom, she again became dyspneic. On the third hospital day, she was scheduled to have a bronchoscopy, but the patient denied consent. Blood for antinuclear antibodies, rheumatoid factor, viral titer, and human immunodeficiency virus (HIV) antibody tests was collected since the patient was not improving. A computerized chest tomogram revealed hilar and mediastinal lymphadenopathy with interstitial, alveolar, and diffuse parenchymal changes. No definite mass was noted. The patient continued to have dyspnea even at rest. All her blood work returned negative, including blood cultures.

As her respiratory status was worsening despite intravenous erythromycin, nebulized albuterol, 40% oxygen via ventimask, and guaifenesin, the patient was transferred to an intensive care unit. Her blood gases on 40% showed pH, 7.41; pCO_2, 36; pO_2, 59.5; and HCO_3^-, 23. Respiratory rate was 40+/min, and chest radiograph showed diffuse interstitial infiltrate throughout both lungs suggesting interstitial pneumonitis (**Figure 2**).



Figure 2. Chest x-ray shows diffuse interstitial infiltrate suggesting interstitial pneumonitis.

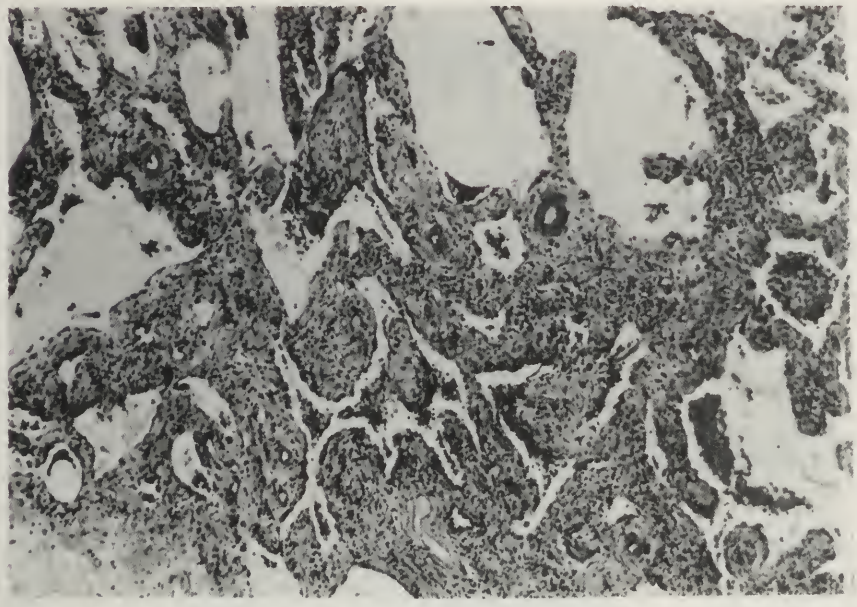


Figure 3. Pulmonary tissue shows interstitial fibrosis with lymphocytes and histiocytes scattered within the fibrous tissue.

She was intubated at this point, as we could not keep her adequately oxygenated. She was started on intermittent mandatory ventilation (IMV) at the rate of 14/minute with tidal volume 700 cc, fractional inspired oxygen (FiO_2) 100%, and positive end-expiratory pressure (PEEP) of 5 cm of H_2O. Her ABG on these settings was pH, 7.36; pCO_2, 49; pO_2, 271; and HCO_3^-, 25. However, her pO_2 continued to drop thereafter, and it was decided at this point that an open lung biopsy should be performed to make a definitive diagnosis.

She subsequently underwent wedge resection of the right lower lobe. The specimen was sent in sterile condition to the pathology department. The biopsy revealed pulmonary tissue showing interstitial fibrosis, with lymphocytes and histiocytes scattered within the fibrous tissue. Numerous alveoli contained mononuclear cells (histiocytes and pneumocytes) as seen in DIP (**Figure 3**). She was immediately started on high doses of steroids (1 g of methylprednisolone in divided doses for three days, then tapered slowly). She did not respond to methylprednisolone and, a week later, started having hemodynamic complications (hypotension). High levels of PEEP had to be used to maintain her oxygenation. On the eighteenth hospital day, she expired.

Discussion

DIP is a disease of unknown etiology. The histologic pattern may vary from dense alveolar septal fibrosis with little or no inflammation to a predominance of lymphocytes and/or plasma cells in the interstices and minimal fibrosis. A desquamative reaction may also occur where alveolar macrophages and type II pneumocytes completely fill alveoli in association with minimal septal fibrosis.[3]

As the clinical picture and radiologic data do not help with differential diagnosis of this condition, and transbronchial biopsy obtains a small specimen, making it difficult to differentiate between types of interstitial pneumonia, an open lung biopsy is indicated.[4] It is important to emphasize that not all peripheral open lung biopsies are representative of the entire lung. Surgeons performing open lung biopsies should avoid acutely angled areas of pulmonary parenchyma, such as the lingula, since these regions frequently demonstrate an abnormality even in normal persons.[3,5]

The clinical presentation varies widely. The most common presenting complaint is dyspnea on exertion and cough productive of small amounts of mucoid sputum. Generalized symptoms, such as weight loss, do not appear until late stages of the disease.

Abnormalities on physical examination are limited to tachypnea, crackles at the lung bases, clubbing, and exercise-induced cyanosis. The chest radiograph typically shows a diffuse reticular or reticulonodular infiltrate with accentuation at the bases. Pleural involvement is rare.

In order to make a definitive DIP diagnosis, a thorough history, complete physical examination, serological tests, and fiberoptic bronchoscopy are necessary to exclude collagen vascular disease, pneumoconiosis, hypersensitivity pneumonitis, neoplasm, and infection. Once these have been ruled out, open lung biopsy should be performed without delay.

Once the diagnosis has been established, the standard therapeutic approach is to use high doses of corticosteroid.[2,3,6] The extent of fibrosis has been shown to be resilient to therapy, while mild fibrosis has been more responsive.[5] These results are based on studies that are retrospective, uncontrolled, have a limited number of patients, or use varying dosage or therapy durations.

Recently, a randomized prospective trial of cyclophosphamide as adjunctive therapy in idiopathic pulmonary fibrosis (including DIP) demonstrated that cyclophosphamide (100–120 mg per day) combined with alternative day prednisolone (20 mg every other day) was no more beneficial than high dose prednisolone (60 mg/day and then tapered) alone.[7]

There was a suggestion of improved survival in patients on cyclophosphamide–prednisolone. This result, however, was shy of statistical significance ($p > .1$). Also in this study,[7] many patients on cyclophosphamide developed neutropenia, thrombocytopenia, or hemorrhagic cystitis.

A prospective, randomized, double-blinded placebo-controlled treatment trial of idiopathic pulmonary fibrosis (including DIP) using azathioprine–prednisolone is currently in

progress. Early results from this study being conducted by G. Raghu, W.J. DePaso, K. Cain, et al indicate that azathioprine is associated with an improvement in gas exchange.

In summary, DIP should be considered in differential diagnosis of dyspnea of unexplained etiology. An open lung biopsy should be done as soon as possible to make a definitive diagnosis. Once the diagnosis is confirmed, high doses of steroid should be instituted.

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Acknowledgments

The author acknowledges the contribution of Dr. Frank Giargiana, chief of the Department of Imaging, Harbor Hospital Center, and Dr. F. Kadifa, critical care fellow, at the University of Maryland Shock Trauma Center. ■

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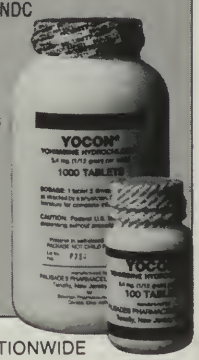
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Vignette of medical history: Lazaretto Point

Joseph M. Miller, M.D.

Dr. Miller is a retired surgeon from Timonium, Maryland.

ABSTRACT: *During the Black Death's reign in the fifteenth century, a number of installations providing care for lepers were converted into quarantine stations. Known as lazarettos or pesthouses, they served as disinfection way stations for travelers and, later, as hospitals for those diagnosed with pestilential diseases (e.g., smallpox, typhus, cholera). Beginning in the late 1700s, quarantine stations and pesthouses were established in the Baltimore area, including Hawkins Point, Lazaretto Point, Fairfield, and Leading Point.*

Lazaretto, an unusual medical name, is ingrained in the nomenclature of Baltimore's geography. Just north of the eastern entrances to the Fort McHenry and Baltimore Harbor tunnels is a site well known to previous generations of Baltimoreans but virtually forgotten at present (**Figure 1**). Lazaretto Point and its lighthouse guarded the entrance to Baltimore's inner harbor for many years. The curious name recalls a period of history stretching back about 550 years and is derived from the practice of quarantine.

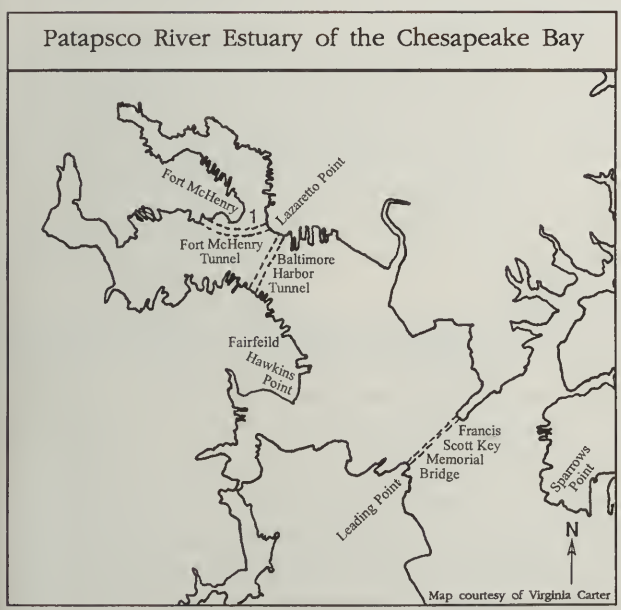


Figure 1. Patapsco River Estuary of the Chesapeake Bay

Few present-day internists or surgeons can recall practice without the powerful help of the ever-expanding world of immunology and chemotherapy. Before this era, deaths occasioned by infectious disease were legion, and, too frequently, the physician was virtually helpless when confronted by them. Well before the discovery of the cause of these ailments, however, health officials grasped the idea that infection could be carried and spread by people and goods coming from infected areas.

Infectious disease importation was an acute source of anxiety to the European nations trading with the East in the Middle Ages.[1,2] Venice, one of the principal places where East met West, initiated steps in 1448 to safeguard against plague when it authorized the formation of a sanitary council. Potentially infected ships, goods, and

people were to be isolated on an island in Venice's lagoon. Having experienced more than 70 plague epidemics in 700 years, Venice was more than ready to seek any type of protection.

The Venetians believed that 40 days were required to dissipate the causes of infections, and so the term "quarantine" (derived from the Latin *quadraginia*, meaning 40 days) was born. Plague, cholera, typhus, relapsing fever, smallpox, and yellow fever were the diseases demanding attention.

During the Black Death's reign in the fifteenth century, a number of installations providing care for lepers were converted into quarantine stations. In Venice, the house of Saint Lazarus was the first such area to be used in 1448 and was called a "lazaretto." The term was derived from the Italian *lazzaro,* meaning leper. The Church of Santa Maria di Nazaret was also used as a pesthouse (house or hospital for persons infected with pestilential diseases) in the fifteenth century. (Lazarus, incidentally, was the name of the poor man full of sores in the well-known Biblical parable.) All merchants and travelers from the Levant (lands bordering the eastern shores of the Mediterranean Sea) were required to remain at the station for a designated time before being admitted to the city. Other marine cities soon followed Venice's example.

Subsequent recognition that these diseases could also travel by overland routes led to the creation of frontier disinfection stations. Persons, merchandise, and mail were isolated and detained according to local regulations.

Later, in the American colonies, New York, Philadelphia, Boston, and Charleston were exposed to communicable diseases, particularly smallpox, brought in by crews and passengers of incoming ships.[3] To prevent the spread of the disorders, towns established quarantine stations. Boston had one in 1717, Philadelphia in 1742, Charleston in 1752, and New York before 1757.

Maryland, too, recognized the dangers associated with infectious diseases early in its history as it was the first colony to enact a quarantine law in 1766.[4] Additions to the basic law were made in succeeding years. In 1792, Dr. John Ross was appointed to control quarantine by sea, and Dr. John Worthington, by land.

Baltimore, itself, although acting a little later, was well aware of the dangers of an epidemic. In 1793, the General Assembly of Maryland, through the governor, authorized the appointment of one or more skillful physicians to visit and examine all foreign vessels and those coming from suspected epidemic areas and, if necessary, exert the full power of quarantine upon the ill.[5] Vessels with diseased patients would not be brought above Hawkins Point. The 1793 law also provided for the erection of a temporary hospital for the reception of such sick people as a physician might direct there to obtain better accommodations or cure.

In 1801, an act for erecting a lazaretto near the waters of the Patapsco River was passed by the Assembly.[6–8] Authorization was provided for the purchase of 10 acres of land, and, if a satisfactory price could not be reached, the power of condemnation was granted. A place appropriate for the reception of individuals with the plague or other malignant contagions was necessary to prevent their spread.

The hospital, built at Hawkins Point due west across the Patapsco River from Sparrows Point and under the jurisdiction of the Baltimore City Health Department, was probably used from 1795 to 1830. During some of that period, a portion of the United States Marine Hospital was equipped for the care of patients with contagious diseases. This particular building, constructed shortly after 1801, was located at Lazaretto Point just across the river from Fort McHenry. The site was destroyed by fire in 1836, and then the US Marine Hospital could not even provide hospital facilities for sailors having ordinary diseases for an extended period of time.

About 1845, the city constructed a new quarantine station called the Marine Hospital in Fairfield just south of Fort McHenry. Designed primarily to care for immigrants, a portion of the building was set aside as a pesthouse for cases of smallpox and typhus fever of city origin. The name "Marine Hospital" was a misnomer as the site was a hospital for immigrants and a pesthouse for the city.

In 1851, the quarantine station was moved to Leading Point about eight miles below Fort McHenry. Two wooden structures were erected—one for sailors and passengers with contagious diseases, and the other to serve as a pesthouse for the city.

The city council had direct control of the institution as shown by a statute enacted on June 2, 1862, which provided for the appointment of a "suitable person, to be known and designated as the Marine Hospital physician" on an annual basis.[9] The individual had to be "a legally authorized practicing physician." All of the physician's duties were carefully and specifically defined by law.

In 1886, public health continued to demand the attention of Maryland legislators.[10] The need for more efficient means for protecting constituents' welfare resulted in further definition of the duties of the State Board of Health and creation of local boards in the counties. These insular groups were to be cognizant of all unhealthy nuisances within their sanitary jurisdiction and take the necessary steps to restrict or suppress these diseases.

In retrospect, maritime quarantine was not particularly effective in Baltimore. In nearly every year from 1794 to 1807, yellow fever epidemics were seen. Although such regulations were lacking between 1807 and 1821, yellow fever appeared only in 1819 and 1821. In addition, hospital facilities for isolation were hopelessly inadequate as only a few patients could be treated. As the city's hospital accommodations grew, many individuals on the steamship lines with scarlet fever, measles, and diphtheria were admitted directly from the ships to the hospitals.

Since 1845, quarantine has served a good purpose, however, in preventing the ingress of the severe types of malaria from Central and South America. Curiously, many patients with smallpox and typhus fever sent from the city to the old Marine Hospital died of malaria contracted while at the hospital.

The Lazaretto Lighthouse of Baltimore was also located on the point of the same name.[11,12] Built in 1831 for $2,100, the cylindrical brick structure was a major navigational aid marking the entrance to Baltimore's harbor. The tower stood for 95 years until it was replaced by a new structure, which remained in place until 1954. Four years later, the property was sold for commercial use, with all evidence of the operation of the point as a lazaretto and a lighthouse having vanished. The name, however, remains on present-day maps.

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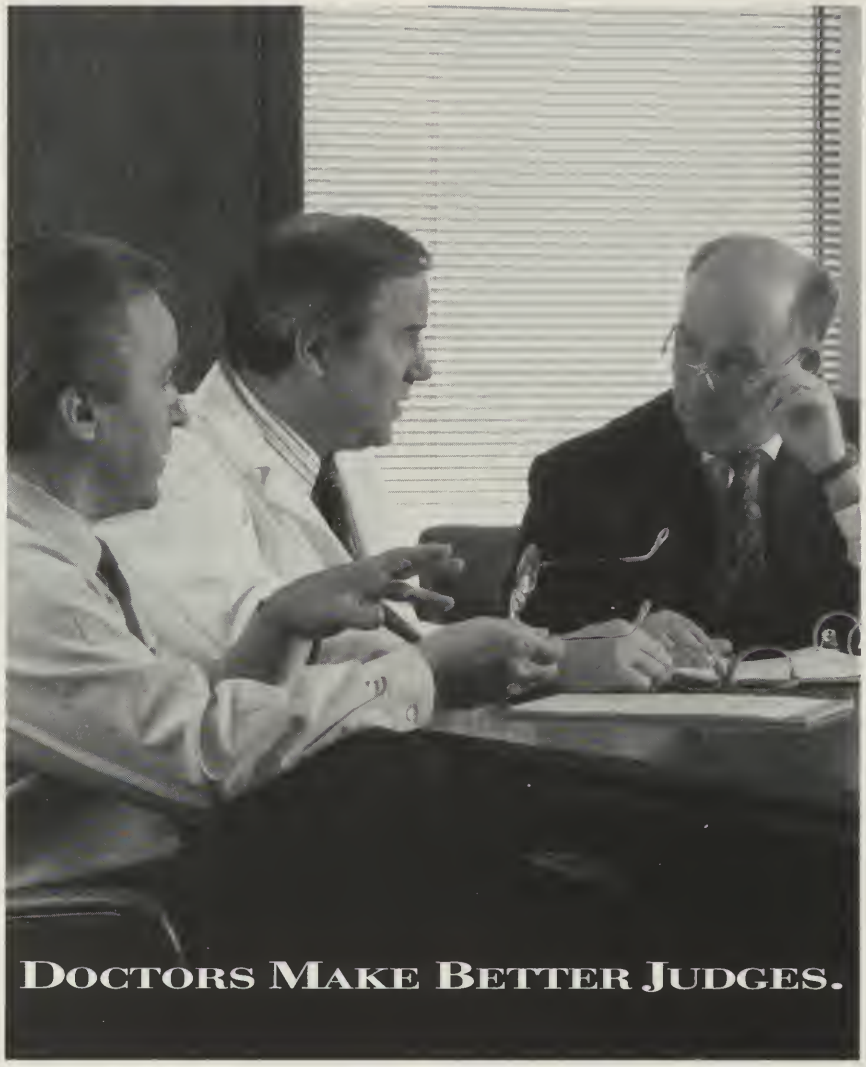
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When the Doctor is Out

Leslie R. Miles, Jr., M.D.: Physician and Priest

"I am active. I'm not sitting around even though I retired."

These remarks by Leslie R. Miles, Jr., M.D., greatly understate his situation. The Allegany County family practitioner and Episcopal priest provides living proof of the adage that says if you want a job done, ask a busy person to do it.

Although Dr. Miles became a physician first, when he became an Episcopal priest, he considered one job equal to the other. In childhood, Dr. Miles had no burning desire to become either a physician or a member of the clergy. How then did he happen to become both? Dr. Miles began with the story of how he became a physician.



Figure 1.
Dr. Miles discusses a patient with Paula Booth, R.N., at the Egle Nursing Home in Lonaconing, Maryland.

"When I got out of high school, the war was going on, and Roosevelt thought he couldn't do it without me, so he suggested that I go in the service, which I did. I wound up in a combat engineer battalion where everyone is some sort of technician—either a truck driver or a rigger or a carpenter or something like that. Fresh out of high school with an academic course, I didn't have any training in anything, so they suggested, 'why don't you become a medic?' I didn't think much of that, but someone said the medics sit around while everyone else does the work, and that sounded like a good deal, so I said, 'All right, I'll go for that.' So you might say, I sort of stumbled into it."

"It sort of flattered my ego, all these guys calling me Doc. I attended to all their minor complaints as well as wounds and injuries and so forth. When I got out of the service, I had the GI bill coming, so I decided to see what I could do to become a physician."

Following his graduation from the University of Maryland School of Medicine in 1953, Dr. Miles completed an internship at Winchester Memorial Hospital in Winchester, Virginia. "In those days, you could do a one-year rotating internship, and then go out and do most anything. When you were an intern, where there were no residents, you were top dog. On the surgical service or the medical service, you were the chief resident, and you had to do it. You had to assume the responsibility. We had a good medical staff, and I really thought that I received a good education from the experience. When I finished my internship then, 'Hey, here I go!' I launched out into the world to do my thing."

Dr. Miles's thing was to practice family medicine in a small community that needed a physician. "I wanted to go someplace that needed a physician. Everybody said I was nuts. There weren't too many of us in my class going into family practice."

The narrow western Maryland valley that contains three towns—Midland, Lonaconing, and Barton—with a combined population of about 6,000 people, had just one physician in 1954. Dr. Miles joined him in November, only to have the physician leave the

following July to enter a residency program. For the next 22 years, Dr. Miles practiced by himself. Finally, a young man from Lonaconing finished college, medical school, and a three-year family practice residency and joined the practice.

In 1954, Dr. Miles paid $92 a year for malpractice insurance, and he did almost everything: obstetrics, surgical assisting, minor orthopaedics, general medicine, and, on occasion, he even gave anesthesia. "My wife tells me that for eight or nine years, I never did take a day off. Beginning at 7:30 in the morning, I made rounds at the hospital where I usually had about seven or eight patients and assisted at surgery, and I probably averaged at least two or three house calls a day. Beginning at noon I would see between 40 and 50 patients a day in the office. I had a pretty busy schedule."

"Assisting in surgery took time, and I was on call all the time. The nice thing about the people was that they appreciated that I was there, and from midnight till seven in the morning, I rarely got calls. They would suffer it out in the middle of the night because they didn't want to bother me."

When he started in practice, Dr. Miles had privileges at a small hospital in Frostburg with about nine other general practitioners and a surgeon on the staff. He manned the emergency room for two weeks at a time, treating anything and everything that came in. When Dr. Miles joined the staff at Sacred Heart Hospital, he helped to form the family practice department, serving as its first chairperson. From there, he became chief of the medical staff, and from that position, he moved on to become the medical director.

"They convinced me to take it on a part-time basis, which I agreed to do. But after about a year and a half of that, I said, 'Look, this is not a part-time job and neither is my practice, and one or the other has got to go.'" The hospital struck a bargain with him to become the full-time medical director. "I quit practice but managed to get another physician in to help out the fellow who was working with me."

After nine years as medical director of Sacred Heart Hospital, he retired. "I kind of loafed around for six or seven months. Then they built a new 60-bed nursing home in Lonaconing, and they got after me to be medical director. So currently, that's what I'm doing."

This may sound like a busy but typical career pattern for a physician in family practice, but Dr. Miles added to his medical career a vocation as an Episcopal priest. "I became an Episcopalian because my wife's father was an Episcopal priest, and we were married in the Episcopal church. We didn't go to church until after we had our second child. Then we decided maybe we better have a little religious education."

Just as in his medical career, one thing led to another; Dr. Miles became a lay reader and then a chalice bearer at St. Peter's. Founded in 1839 by the English owners of the early coal mines in the region, it is the oldest church in the valley. Small parishes like those in western Maryland experience frequent turnover of clergy, Dr. Miles explained. "And in our church, as well as adjacent churches, when there would be a vacancy, I would fill in. As a lay reader, I could do morning prayer."

A family tragedy intensified Dr. Miles's interest in religion—the death of a son at the age of three. "Some sort of disaster makes you either more religious, or you say the



Figure 2.
Dr. Miles heads the congregation at St. Peter's Church in Lonaconing, Maryland.

heck with the whole thing. I went with the more religious side of it."

Although Dr. Miles disagreed frequently with the parish priest who preceded him at St. Peter's, it was this very priest who told the bishop that the only way St. Peter's Church, with only 12 communicants, would survive was if he would ordain Dr. Miles.

"I didn't know this until the bishop put pressure on me, and I turned him down every which way, but I ultimately wound up doing what I am doing now. I spent a year with two priests. We had lunch every Wednesday and spent the whole afternoon discussing theology, and they gave me a bunch of books and said read these, and we will see you next Wednesday."



Figure 3.
Dr. Miles measures blood pressure of Ms. Lily Ross, one of his patients at Egle Nursing Home.

"It was a rather strenuous year because I was still practicing family medicine full time and doing all this reading. I would be up till 2, 3, 4 o'clock in the morning reading, and then I would get up in the morning and go to work. It was kind of tough on the married life, but we survived. When I was ordained in 1972, virtually every parishioner was also a patient, but it worked out fine."

Dr. Miles has served at St. Peter's ever since. "Now we have 97 communicants and about 24 in Sunday school. We have a lot of young people coming up, which speaks well for the future."

After 20 years in the priesthood, Dr. Miles finds it impossible to keep his two careers separate. "My religious training has helped me tremendously to get people to accept the misfortunes of life. If someone has a terminal illness, I can advise him or her medically and spiritually as well. The same thing happens in reverse; when dealing with a parishioner, I can counsel him or her about a medical problem."

Dr. Miles related an example. Recently, when a parishioner received communion, Dr. Miles noticed his pale and waxy look. "I thought this fellow looked terrible, and his hands looked awful, so after a couple of weeks of this, I went to his house." After a cursory look and some questions, Dr. Miles persuaded the man to have blood work done, which revealed leukemia. "The man was referred to an oncologist, and now he's doing fairly well. So you might say from my ministration as a priest, I am able to recognize a pathological situation in a parishioner and get him or her into medical treatment."

"I tell patients and parishioners, 'If you want to get well, it takes your physician to work with you; it takes you to have the courage and strength; and it takes God. I can guarantee you that God doesn't let you down, and I can guarantee you your physician isn't going to let you down.' I never pray for anyone to be cured. I say God's will be done because this is what will happen whether I want it to or not, and I pray for courage and strength and patience. I didn't pray to have the blizzards of '93 go away. I prayed to have the strength to go out and shovel."

"I think the difference between the Old and the New Testaments is that in the Old Testament, God talked to prophets, and they went out and told people, but the people didn't listen too well or too long. Ultimately, God said, 'This doesn't work, I've got to do something else, so I'll go down there myself and show them how it works.

I'll show them and I'll talk to them.' Which he did, and they took him out, and they strung him up. So God said, 'What more can I do? I've sent you prophets; I've talked to you; I've shown you. Now you're on your own. I'm not parting any Red Seas these days.' It's like your father sends you out to get a job, saying, 'Now I'll give you support. I hope you do a nice job. If you need some advice, call on me, but fella, I'm not giving you any more money, and I'm not putting a roof over your head. You've got to do things yourself.'"

"So we have a father we can talk to anytime. We can ask for advice. I figure that when any little tragedy happens to me or to anybody else, He sits up there and cries just as hard as if my earthly father were there and saw this tragedy. When my son died, my father was still living, and he was tremendously upset. But he couldn't give me another son. The only thing he could do was pat me on the back and say, 'I'm with you all the way.' And this is the way I think God works."

Dr. Miles does not find any greater satisfaction in being a member of the clergy than in being a physician, but he sees it as two different ways of looking at people. "There is a spiritual and a physical side; as a physician, I enjoy what I do. It's very pleasing to deliver a baby and see the parents smile and see the baby do fine. There's a medical satisfaction in curing some condition or even just controlling it satisfactorily. There's also much clerical satisfaction in, if you want to put it bluntly, saving a soul and helping somebody to understand God and the life he or she leads. I can get carried away and think I am a little closer to God than anybody else, but I'm not."

Like medicine, the main drawback of a clerical career is its demands on time. "Being a cleric involves much more than an hour Sunday mornings. There are a lot of night calls; there are weekend calls; there are a lot of times when I jump and run, and I can't leave without getting some sort of coverage. If I go away, I've got to get somebody to cover me in both fields."

Dr. Miles said that the nicest thing about his current schedule is not having to live according to the clock. "I go to the nursing home five days a week, but whether I get there at 9, 9:30, or 10:00 a.m. doesn't make a whole lot of difference, and I don't get the calls at night that I got when I was doing general medicine. The same applies as far as church is concerned. I can set my schedule and work around the visitations and calls, but there are still plenty of meetings."

"I am still very active in the county medical society and the state medical society, so there are meetings there. I have been the president and am now the treasurer of the ministerial association in our community. I'm also on the county zoning appeals board that meets once a month to listen to appeals for variances in zoning laws."

"I've enjoyed it," Dr. Miles concluded, "but I am glad it's at a slower pace at this point. We have a swimming pool, and one day last summer when things were a little slow, I was out by the pool lying in the sun and dipping in the pool when I got hot. This other priest drove by and said, 'Man that looks like a rough life.' I said, 'When you get organized like I am, you have no problem.'"

If you want a job done, ask a busy person to do it.

CORA TETER, M.S.

Ms. Teter is managing editor of *Straight Forward* and project coordinator of Focused Professional Education at Med Chi. ■

A Moment with Endocrinology and Metabolism

Treating a hot thyroid nodule

Dear Consultant:
I would like to ask about treatment for a patient with a hot thyroid nodule. The patient is a 45-year-old woman whose gynecologist found a 2 cm thyroid nodule in the right lobe of the patient's thyroid. The patient was referred to me. I conducted thyroid function tests and a thyroid scan. Blood test results were normal, including a T_4 (thyroxine) level of 8.7 µg/dL (5-12), T_3 (triiodothyronine) resin uptake of 32% (25%–35%) and a TSH (thyroid-stimulating hormone) level of 0.8 µU/mL, (.3–5). Thyroid scan showed the nodule to take up technetium more than the rest of the gland, but without suppression elsewhere.

Please advise me as to therapy. Does the patient need surgery or radioactive iodine, or would she benefit from thyroid hormone suppression?

Dear Doctor:

Evaluation and treatment of a functioning thyroid nodule contains many options and no absolutes. The clinical considerations are the following:

- Does the size of the nodule create a problem? (That is, does it cause airway or esophageal compression or other local discomfort.)
- Is the nodule that is overproducing thyroid hormone causing hyperthyroidism?
- Could the nodule be malignant?

The answers to these questions provide the therapeutic choice. If the nodule is large enough to cause compressive symptoms, then therapy should be undertaken. Options include thyroid hormone, radioactive iodine, and surgery.

Hot nodules are not likely to suppress with thyroid hormone, and a real risk of causing exogenous hyperthyroidism exists. Since the rest of the gland is not suppressed, nor is the TSH, there is a slight chance of suppression in this case. A T_3 suppression test in which oral T_3 is administered and a repeat scan is done to look for decreased uptake in the nodule is one approach to see if suppression would work; however, it has a relatively low chance of success.

Radioactive iodine is not appropriate because the rest of the gland is not suppressed. Therefore, the radioactive iodine would damage the entire gland, and a strong likelihood of subsequent hypothyroidism would then exist. The only guaranteed option for relief of compressive symptoms is surgery.

Determination of hyperthyroidism is dependent on measurement of TSH, which, in this case, is not suppressed. Hot nodules possess an equal likelihood of progressing to hyperthyroidism, resolving on their own, or remaining unchanged. Watchful waiting is, in general, the best course of action.

Hot nodules are almost never malignant. In the rare exceptions, careful follow-up, not surgery, is indicated. Thyroid biopsy would not be helpful. All hot nodules contain follicular tissue, and a biopsy would be read as inconclusive, thus not helping the decision process.

JAMES H. MERSEY, M.D.
Editor

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Hay ID, Morris JC. Autonomously functioning thyroid nodules. In: Braverman and Utiger (eds). *Werner & Ingbar's the Thyroid.* Philadelphia: Lippincott. 1991. ■

To Our Readers

A new format for "A Clinical Moment with Diabetes" has been created. Content material will now include endocrinology and metabolism, as well as diabetes. Questions will be from physician to consultant. We hope this new format will allow for more useful information for physician readers. It will also provide a forum for responding to readers' questions. If you have a particular question, please forward it to the department editor: James Mersey, M.D., Suite 411, 6565 North Charles St., Baltimore, MD 21204.

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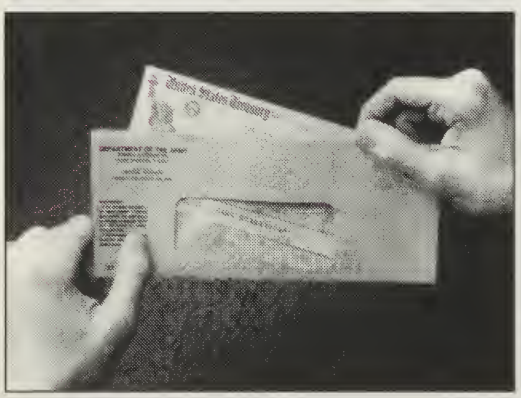
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WORD ROUNDS

Bart Gershen, M.D.

"What's a Felty?"

In this month's *MMJ,* there is an article on **Felty's syndrome** (page 1113). The review was enlightening, but it had another, rather tangential, effect on me as I read it. I was constrained to ponder the eponym. (Greek *epi* 'upon' + *onyma* 'name'—any term that derives from a proper name.) For example, **Bright's disease** or **Hodgkin's disease**, respectively named for Richard Bright and Thomas Hodgkin, who were nineteenth century contemporaries at Guy's Hospital in London.

Eponyms—forgotten lives and faceless names—condemned to serve as insignificant and undistinguished common nouns. We repeatedly do this to our language. It is one of our most endearing eccentricities. But the idiosyncrasy is not confined to medical terminology.

Consider the case of the Frenchman who became a German engineer. He sought to develop an engine that could outperform the Watts' steam engine. In 1892, he patented the engine, then spent the rest of his life struggling to introduce it to the world. No one listened. In 1913, while crossing the English Channel, the inventor disappeared. He was never seen again. Only after his death did the world recognize that his engine embodied a pivotal advance in machine design. Unfortunately, Rudolph **Diesel** was unable to behold the triumph of his own genius.

There is also the tale of Queen Artemisia whose husband ruled Ionia around 400 BC. After her husband's death, she commissioned a magnificent burial chamber. It was built of marble with Ionic colonnades resting on a tall base surrounded by sculptured lions. At the summit, there was a large pyramid with 24 steps leading to a magnificent chariot. The structure became one of the seven wonders of ancient civilization. And, it became indelibly associated with its only resident—King **Mausolus**—resulting in the mysterious and haunting term: **mausoleum.**

Certain foods we eat convey mute testimony to their author. In 1829, a young Presbyterian minister maintained that Americans drank too much alcohol, ate too much meat, and used too much white flour in their bread. He championed a vegetable diet and homemade, unsifted wheat flour. Throughout the nation, "temperance" boarding houses were established. In fact, an entire commune was developed near Boston to foster the minister's nutritional convictions.

Ultimately, the furor faded, the minister languished into obscurity, and his dietary principles were forgotten—except for a cracker made from his special, coarse flour. The cleric's name was Sylvester **Graham.**

(Incidentally, the Presbyterian church derives its name from the Greek word *presbys* 'old'—as in presbycusis or presbycardia, which are diseases of old age. The church is governed by presbyters or elders.)

Melba toast is named for the Australian diva Helen Porter

Mitchell, who adopted the stage name **Nellie Melba** after Melbourne, her birthplace. (Peach ice cream covered with raspberry sauce is also named for her—peach **Melba**.) **Beef stroganoff**, named for a Russian diplomat, Count Paul **Stroganoff**, and **Chateaubriand steak**, named for François René, Vicomte de **Chateaubriand**, are also properly endowed—as are Roquefort, Cheddar, Edam, and Gorgonzola cheese, each of which bears the imprimatur of its place of origin.

Clothes, too, are often endowed with proper names. A coarsely woven cotton fabric was imported from the French city of Nimes for use in making overalls. It arrived bearing the seal "de Nimes"—and so became **denims**. Blue **jeans** come from the Italian port of **Genoa** where the cloth is manufactured. (In old French, Genoa was known as *Genes*, an American version of which became **jeans**).

Argyle socks, **Oxford** shoes, **cardigan** sweaters, **dungarees, Levi's®**, **derby** hats, **tuxedos**, and **mackintosh** raincoats—all carry names of persons or places.

Nevertheless, medicine remains the mother of all eponyms. **Felty's syndrome**, for instance, described by Augustus Roi **Felty** in 1924, is characterized by splenomegaly and pancytopenia in patients afflicted with rheumatoid arthritis.[1] Dr. Felty was a second-year medical resident at Johns Hopkins when he wrote that paper. Unfortunately, his academic career was all too brief. He was obliged to return to Hartford, Connecticut, to help his ailing father in his general practice. After 30 years in practice, Felty retired. In 1964, he died of a stroke, but his eponymic disease endures.

Most medical eponyms are readily identified as such. The aforementioned **Bright's** and **Hodgkin's** diseases represent classic examples—as do **Babinski's** sign, **Parkinson's** disease, **Huntington's** chorea, and **Raynaud's** syndrome. There are several medical eponyms, however, whose derivation from a proper name is not quite so obvious.

A Y-shaped anastomosis that includes the small intestine is called a **Roux-en-Y**. It is named for the Parisian surgeon who first described the procedure in 1908. His name was Jean Charles **Roux**.

Anatomic terms often bear the names of those who initially described them. Gabriele **Fallopio**, who characterized the oviducts that now bear his name, originally intended to enter the seminary. Fortunately for us, **Vesalius** persuaded him to undertake a medical career. In 1551, Fallopio succeeded the great Vesalius to become professor of surgery and anatomy at the University of Padua.

Fallopio's contemporary, Bartolomeo **Eustachio**, was also his chief rival. In 1562, Eustachio described the small tubes that connect the nasopharynx to the middle ear. He was also the first to describe the adrenal glands, and he produced a remarkable set of 47 anatomical drawings, which include a spectacular illustration of the sympathetic nervous system and of the valve guarding the entrance of the inferior vena cava into the right atrium—ultimately called the **Eustachian** valve.

One hundred years later, the auditory tubes were named for Eustachio by another obscure "eponymogenist," Antonio Maria **Valsalva**. The exercise in which expiration is forced against a closed glottis carries the **Valsalva** epithet.

In 1898, a cytoplasmic network of tubules and vesicles was discovered by Camillo **Golgi**, who was already known for his description of the chrome-silver nitrate stain for nerve tissue. The cellular organelle was understandably named the **Golgi** apparatus. In 1906, Golgi was awarded the Nobel Prize for medicine or physiology.

Other well-known anatomic features such as **pacinian** corpuscles, **meibomian** and **nabothian** cysts, and **Negri** bodies are also eponyms, named, respectively, for Filippo **Pacini**, Heinrich **Meibom**, Martin **Naboth**, and Adelchi **Negri**.

The **Luer** lock syringe was invented by Frederich **Luer**, a German fabricator of glass instruments. It is often used to start intravenous infusions of lactated **Ringer's** solution—named for the physiologist Sidney **Ringer**, professor of medicine at University College in London, who used it to preserve his isolated frog heart preparations.

The **Moro** reflex—the famous startle response—seen in normal children six months of age or younger, was described in 1910 by the Austrian pediatrician, Ernst **Moro**. He had previously isolated the *Lactobacillus acidophilus* bacterium, and was first to introduce intradermal skin tests for tuberculosis.

The **Queckenstedt** test, compression of the jugular vein to test for subarachnoid blockage, was developed in 1916 by a German physician, Hans Heinrich Georg **Queckenstedt**. He was killed by an army truck on the last day of World War I.

Petri dishes, **Somogyi** units, **Westergren** sedimentation rates, **Snellen** charts, **Wood's** light,

Rorschach tests, **Wheatstone's** bridges, **Trendelenburg** positions, **Kussmaul** breathing, and **Christmas** factor are all lasting monuments to the people for whom they were named. Perhaps, after this, they shall no longer be entirely faceless labels.

Reference

1. Felty AR Chronic arthritis in the adult, associated with splenomegaly and leukopenia: A report of five cases of an unusual clinical syndrome. *Bulletin of the Johns Hopkins Hospital*. 1924; 35:16–20. ■

Erratum

Although listed in the Table of Contents, the name of the author of Word Rounds—Bart Gershen, M.D.—was inadvertently omitted from the column's title page in the October issue. The *MMJ* regrets the error.

4th Annual conference on Addiction

The problems of addiction and the need for treatment are ever-present in our society. Primary care physicians and other health care professionals must be able to screen, diagnose, and initiate treatment for their patients with addictive disorders. The 4th Annual Conference on Addiction is designed to educate all health care professionals in fulfilling these essential patient needs.

The conference has been designated for 8 credit hours in Category 1 of the Physician's Recognition Award of the American Medical Association. Speakers at the conference will be Max A. Schneider, M.D.; David Nurco, D.S.W.; The Honorable Harold E. Hughes; Lee P. Brown, Ph.D.; Father Joseph C. Martin, S.S.; and N. Joseph Gagliardi, M.D.

Registration fees for this conference include tuition, continental breakfast, refreshment breaks, lunch, and materials. Costs are $60 for Med Chi members, $100 for nonmember physicians and Ph.D.s, $40 for allied health professionals, and no charge for medical students and residents. To register and for further information on this exceptional conference, call the Physician Rehabilitation Program at 410-962-5580 or 1-800-992-7010.

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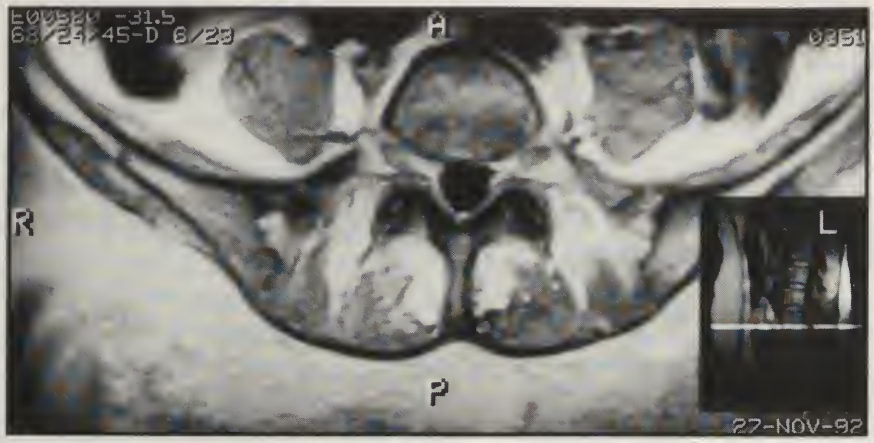
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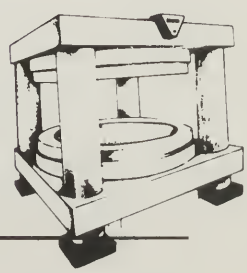
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Book Reviews

Without Conscience. The Disturbing World of the Psychopaths Among Us.
Robert D. Hare. New York: Pocket Books. 1993. 142 pages. $21.00

Psychopaths have been part of our culture from time immemorial. One of the earliest, famed in story, was Bluebeard—the villain in a novel written by Charles Perrault in 1697. Bluebeard murdered six wives for their disobedience before the seventh had good fortune to escape.

Books, motion pictures, television, and newspaper articles currently tell the stories of serial killers, rapists, swindlers, abusers of spouses and children, drug barons, and terrorists. According to present psychiatric and legal standards, these individuals are not insane, and their activities are not the results of deranged minds but of a calculating rationality and an inability to think and treat others as human beings.

Their problems are not isolated since Hare states that two million psychopaths exist in North America, with at least 100,000 in New York City. A lifetime prevalence of an antisocial personality in the general population ranges from 2.1% to 3.3%, with the peak being in the 22–44 year-old age group. Among incarcerated felons, 52% of the males were psychopaths as were 65% of the females.

These unusual members of our society manipulate their way through life without feelings for the rights of other. Intrigued by their actions, Hare has analyzed them on the basis of his extensive personal experience in the Canadian penal system, as well as research and review of the literature.

The most obvious expressions of psychopathy are manifested by open violation of law and order. Many of these individuals are criminals. They are egocentric, callous, and remorseless. Deeply lacking in empathy, they function without the restraints of conscience. In some respects, psychopaths are similar to the emotionless androids depicted in modern science fiction.

Hare defines the psychopath in terms of emotional-interpersonal and social deviant symptoms. Glib, superficial, egocentric, and grandiose, Hare points out that these individuals lack feelings of remorse, guilt, and empathy. They are deceitful, manipulative, and shallow. In addition, they are impulsive, behave poorly, need excitement, and show a lack of responsibility. These factors combine to create distinct antisocial behavior problems starting in youth.

The appearance of psychopathy in the earlier years evokes the question "Why"? Hare states that some adolescents deviate from normal behaviors because of a poor social environment, but the psychopath seems to be off track from the start. The parents of psychopaths are usually aware that something is wrong even before school starts since the children grow with a stubborn immunity to moral and social pressures. These are the "different" children: liars, defiant ones, petty thieves, fighters, individuals cruel to animals, vandals, and early sexual experimenters.

Failure to recognize these fearsome personality changes may lead parents, the author states, to continuing conferences with school principals, counselors, psychologists, and psychiatrists. A succession of inappropriate treatments at considerable expense and emotional cost can follow.

Hare illustrates many psychopathic personality defects using accounts of real people as documented in the media. Who can forget "Son of Sam"?

The author points out that traditional psychotherapy has little to offer these individuals. External control of their behavior is a necessity, but even where parole, prisons, or hospitals exist,

psychotherapeutic relationships rarely change their behavior. Nothing seems to work, primarily because these people do not believe that they have reasons to conform to societal standards with which they do not agree. In many instances, treatment programs seem to provide them with better methods of manipulation, deceit, and use of people. The gathered evidence is depressing, engendering the concept that these people are untreatable and unmanageable.

Recognizing the urgent need for new ways to deal with criminal psychopaths and cognizant of the prevalent pessimism about traditional therapy, Hare is engaged in exploring new ways to aid these people. He has convened an international panel of experts in psychopathy, psychiatry, criminology, correctional treatment, and program design and evaluation. The main therapeutic thrust will be an attempt to convince the wrongdoers that their current attitudes and behaviors are not in their best interests.

Hare concludes his volume with some practical survival rules should one become involved with a psychopath. Professional advice should be sought early to make life easier and to enter the transitory stage from being a victim to protecting oneself.

This book is written for popular consumption and is not specifically directed to the medical profession. School counselors, psychologists, and, perhaps, some psychiatrists will acquire interesting and instructive information. The laity will gain an understanding of the bizarre personalities whom they may have encountered or have seen in the news media. Hare's further experience in the program he envisions should be instructive. The book should be on the shelves of public and medical libraries for widespread availability.

Well written, it has a good table of contents and an excellent bibliography, but suffers from lack of an index.

Joseph M. Miller, M.D.
Timonium, Maryland

■ ■ ■

Laparoscopic Abdominal Surgery. John N. Graber, M.D., F.A.C.S.; Leonard S. Schultz, M.D., F.A.C.S.; Joseph J. Pietrafitta, M.D.; and David F. Hickok, M.D., F.A.C.S. (eds). New York: McGraw-Hill, Inc. 1993. 349 pages. $115.00

An eminent mathematician once remarked that he could never be satisfied with his knowledge of theory until he could explain it to the next man he met on the street. A convincing explanation, of course, necessitated that the unknown individual have some information about the subject.

In 1938, Spivack, a prominent surgeon, wrote that good surgical technique could be displayed if certain conditions were met. These included (1) gentle handling of the tissues; (2) a surgeon thoroughly familiar with every step of the operation; (3) a not unduly prolonged intervention duration; and (4) a well-exposed operative field with the individual tissues accessible should complications occur.

Graber and his associates have attempted to satisfy these concepts in discussing laparoscopic abdominal surgery. They present entirely new concepts for the performance of operations that have been done only during the last 10 years. The initial appeal to the patient, particularly with regard to cholecystectomy, was that the procedure could be performed through small entry portals, thus eliminating the large, right subcostal incision. This particular technique ushered in an era of minimally invasive surgery for any number of operations. Complications were minimal, and the first 300 patients returned to work without restriction within five to six days.

A surge of interest in laparoscopic surgery led to the writing of this text. The authors emphasize that although they have done their utmost to provide details about the conduct of these procedures, book study alone will not substitute for hands-on laboratory training, experience assisting surgeons qualified in the new techniques, and excellent supervision during initial clinical operations.

Graber et al contend that the future of surgery lies in "less invasiveness," although comparable procedures done in the usual manner have produced similar results. Shorter hospitalization periods and more surgery that can be done on an outpatient basis, however, are tangible assets of the new methods.

The performance of these highly technological operations will cost patients and insurance companies less, despite the increased expense from the use of electronic age equipment. In addition, the price of the hospital stay will be reduced.

Resolution of the training problem is difficult. Surgical residents may acquire some necessary skills during their periods of preparation, but until these new operations become routine, residents and established surgeons must take additional courses in the new type of surgery. One fact that cannot be escaped is that individuals performing minimal invasive surgery must be thoroughly grounded in the conventional open procedures. They must know the anatomy of the abdomen and should have performed the procedure in the traditional or "old" way. An occasion could arise in which a surgeon might be forced to abandon the new operation methods and proceed with an orthodox laparotomy.

The first portion of the book is devoted to the instruments used. Laparoscope,

lasers, cautery, and operating needs are meticulously presented. Details of irrigation, suction, suturing, and knot tying are well described.

A coordinated operating team is mandatory if good results are to be obtained. The group should include a surgeon, an operating assistant, an anesthesiologist, one to two scrub nurses, a television specialist, and, possibly, a laser expert.

Succeeding chapters, are devoted to anesthesia, general laparoscopy complications, appendectomy, cholecystectomy, cholangiography, common duct exploration, peptic ulcer surgery, gastroesophageal reflux treatment, inguinal herniorrhaphy, and resection of the large and small intestine. All operations are well described and depicted by excellent illustrations, some of which are in color.

Even a well-trained surgeon cannot perform laparoscopic surgery after careful study of this book. However, when used in conjunction with laboratory exercises, and assistance to, and then direct supervision by, a qualified specialist, the future laparoscopic surgeon will find the text tremendously helpful. This book was not written for medical students or general practitioners. As Gray is to anatomy, so Graber et al are to trained surgeons in this new flourishing sphere of activity.

Joseph M. Miller, M.D.
Timonium, Maryland ■



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Forty years ago

Forty years is a fascinating interval. It can be seen as a generation—four decades of change and advancement: new medications, new diagnostic tools, and new techniques and procedures.

On the other hand, human nature may not have changed very much. *Plus ça change, plus c'est la même chose.*

Excerpts from the past are selected to remind us of our limitations. Some limitations of the past may seem silly in today's scientific light, but others may point out the ignorance of today and the need to mush on with some humility.

1953:

Saul Bellow published "The Adventures of Augie March." Ben Hogan won the US Open, Masters, and British Open. The Soviet Union exploded an H-bomb.

Below is a monthly report from the Blues and a cautious pitch to Med Chi's House of Delegates. With such an arrangement, everyone seemed a winner. Does it seem too good to be true?

JOHN W. BUCKLEY, M.D.

Report for the Board of Trustees of Maryland Medical Service, Inc.

Reprinted from the *Maryland State Medical Journal* 1953; 2(7): 391–92.

Maryland's Blue Shield plan has come a long way in its two brief years of existence. It now serves 197,000 Marylanders, 37,000 more than at the end of 1951. Our enrollment gain for 1952 under the standard program was 50 %, and nearly half of this gain came after September 1, when changes in the fee schedule and subscription rates materially improved the attractiveness of the plan. The plan's income in 1952 went over the million dollar mark, and, of this amount, 83.6% was paid in benefits to subscribers. Compared with the early record of Blue Cross—a remarkable story of progress in itself—our growth has been steady and healthy, and a certain amount of optimism seems justified.

Despite its successful progress, Blue Shield still has far to go to meet its basic obligation—an adequate and effective means of financing physicians' services for as many persons in the community as possible, at a price they can afford to pay.

Let us analyze this objective. Is the protection adequate? It seems as nearly so as we can make it right now, although in time we will probably wish to broaden it. Last year we paid benefits to about 1 in every 10 persons enrolled. Of these cases, under our own plan (excluding the special surgical program for Bethlehem Steel employees), 60% of the cases involved surgery, 31% were medical, and the remaining 9%, obstetrical. These figures show the importance of our medical coverage, which is not always available elsewhere under Blue Shield or commercial insurance programs.

Is the price one the great majority can afford to pay? Apparently it is, judging from our own experience and that of Blue Shield plans in other areas. Whether it could be increased in order to broaden benefits is a question that must some day be studied.

But what of our objective to make Blue Shield available to as many persons as possible? Here we have only scratched the surface of our potential market. We have enrolled only 22% of the Blue Cross membership. A tremendous selling job remains to be done, and this is not easy, since we find that in the majority of large groups we have to replace an existing commercial coverage taken out in the years before Blue Shield was in existence.

One of the most important features of Blue Shield—one that could and should be the most important—is the service benefit feature whereunder participating physicians agree to make no additional charge for covered services to individuals and families with annual incomes less than the pre-established amounts. This is the one factor that distinguishes Blue Shield from commercial health insurance.

To persons in the lower income brackets, this service benefit feature means full protection against unexpected medical bills. They get the best medical care and are able to budget for it in advance through membership in Blue Shield.

In agreeing to provide services at pre-determined fees to persons in the lower income brackets, the physician is not deviating from the established practice of charging patients according to their ability to pay. At the same time, he is providing real service to the community.

The phenomenal growth of Blue Shield—24 million members nationally—has been one of the chief factors (along with the growth of Blue Cross) in persuading the proponents of federal compulsory health insurance that the provision and financing of medical care for the self-supporting population can be achieved on a voluntary basis.

Blue Shield is our creation. It is controlled here and elsewhere by the medical profession. We collect the money and undertake to provide the services of qualified physicians, which is right and proper since our interest is paramount. But with our control goes responsibility, and with responsibility goes opportunity. If any other agency, in or out of government, undertook to provide the public with professional services, we would lose control of medical practice.

The continued success of Blue Shield will depend entirely upon the degree of our voluntary cooperation and participation. Hence, we must endorse Blue Shield to our patients and friends. By so doing, we will bring the program closer to its objective—an adequate and effective means of financing medical care for as many persons as possible at a price they can afford to pay—and we will have rendered a real service to our patients, to the community, and to ourselves.

HUGH J. JEWETT, M.D.

Dr. Jewett, who was on the *Maryland State Medical Journal* editorial board from 1952 to 1960, read this paper before the Med Chi House of Delegates on April 27, 1953. ■

Highlights: Executive Committee and Council Actions

Executive Committee meeting, August 26, 1993

- Med Chi will support legislation applying a cap on noneconomic damages to wrongful death actions.

- Three recommendations from the Committee on Public Health were approved and will be submitted to Council: (1) that Med Chi support the list provided by the Maryland Association of County Health Officers (MACHO) as a reasonable list of services to be provided by local health departments; (2) that Med Chi continue its participation in the Coalition for a Smoke-Free Maryland but not be the agent responsible for organizing and staffing the coalition; and (3) that Med Chi support the coalition's six principles.

- A press conference will be held on September 8 to announce the family violence initiative to be sponsored by Med Chi. The Committee on Public Health and the Public Relations Committee will continue promoting this initiative.

- The Executive Committee approved the Public Relations Committee's recommendation to enhance Med Chi's internal communications program as outlined, but tabled the second part of the recommendation to hire a firm to develop and coordinate a public relations campaign to enhance the image of Maryland physicians.

- The Executive Committee approved the Public Relations Committee's recommendation that although Med Chi has no control over individual physicians choosing to advertise, component societies should be requested to refrain from providing endorsements when individual physicians are promoted.

- The Committee on Specialty Societies requested that the Executive Committee explore ways to enhance communication about Med Chi activities with the various specialty groups. In response to this request, Dr. Snyder, Med Chi president, will write to the specialty societies suggesting that they seek out specialty society members in leadership roles at Med Chi and contact these members if they have a particular interest. Med Chi staff will explore the cost and personnel demands to provide newspaper clippings to specialty societies.

- The Committee on Physician Rehabilitation recommended a three-part policy statement on physician use of alcohol in relation to patient care. After discussion, the Executive Committee adopted the following policy statement: *The Faculty finds that it is totally unacceptable for a physician to drink alcohol in proximity to examining and treating a patient in any setting. The relationship between patient and physician is harmed by the patient being aware that the physician has recently used alcohol, as noted by: an odor of alcohol; slurred speech; lack of motor coordination; or cognitive impairment. The use of alcohol in such situations is likely to lead to a reduction in quality of care and raises the likelihood of harm to the patient. It is therefore recommended that a physician on duty, on call, or planning to evaluate or treat a patient, will not drink alcohol.*
  The committee's recommendations concerning a policy statement on physician use of alcohol in relation to patient care will be forwarded to Council for approval, with the Executive Committee's recommendations noted.

- The Committee on Drugs requested guidance on the proper handling of requests for amphetamine and methamphetamine permits that fall outside of current regulations and how to ensure that the committee's procedures for granting permits are in compliance with state regulations. The committee and Med Chi general counsel were directed to work together to revoke the regulation mandating that Med Chi issue permits to physicians for the use of amphetamines and methamphetamine.

- Following a brief Legislative Committee report, the Executive Committee passed a motion to send a letter to the House of Delegates, along with the amendments submitted by the county medical societies, explaining why it was not feasible to present all the amendments to the legislature and was more appropriate to have the lobbyist and general counsel work through the Health Care Access and Cost Commission to improve HB 1359.

- The Finance Committee was instructed to look into whether Executive Committee members should be re-

imbursed for expenses and, if so, the criteria for determining reimbursement.

- The Executive Committee approved a Med Chi member survey regarding managed care, with results being forwarded to the Executive Committee.

- Rose Matricciani, R.N., J.D., chief operating officer, updated the Executive Committee on the x-ray aide test results. Of the 112 individuals who took the x-ray aide course, 42 passed the test with a grade of 75% or better. Some individuals who took the course were not employed in physicians' offices. A retest will be given in September; it will be given free of charge to students who did not pass the test previously.

- Angelo Troisi, F.A.C.H.E., chief executive officer, will send self-referral research teams at the University of Baltimore and the University of Maryland packets of studies relative to the self-referral issue.

- The Committee on Public Relations will study the issue of Executive Committee members' attendance at various fund-raisers and events in order to improve the public's perception of physicians.

- Dr. Snyder noted that the AMA will administer the Robert Wood Johnson Grant Program to help states fight tobacco use.

- The Executive Committee approved the request from the Committee on Computers in Medicine that a questionnaire on computer use in medical offices be published in the *MMJ*.

- The Executive Committee met in executive session for approximately two hours to review the audit report.

- The recommendation of the Finance Committee that there be no dues increase was tabled. The Finance Committee's recommendation that a fiscal note be attached to every committee recommendation was approved. Both recommendations will be reported to Council with the actions of the Executive Committee.

- Because of the interest in becoming Med Chi members expressed by physicians in academia, Dr. Snyder appointed an Executive Committee subcommittee to investigate and recommend membership classes and a dues structure for physicians in academia; and determine how Med Chi could meet the needs of these physicians.

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MMJ announcements for physician placements in the classified advertisements are charged at the regular classified advertising rate.

Minutes of the 341st session of the House of Delegates

Special meeting, Thursday, July 15, 1993

Call to order

The 341st session of the House of Delegates was called to order by the president and chairperson, Joseph Snyder, M.D., at 4:05 p.m. This was a special meeting called by the president to discuss HB 1359.

Invocation

Donald "Ted" Lewers, M.D., a Med Chi member and a guest at today's meeting, delivered the invocation.

Announcements

The chairperson drew the delegates' attention to the announcements contained in the agenda and reminded members that when they had the privilege of the floor, they were to announce their name and component medical society.

President's remarks

Dr. Snyder introduced George S. Malouf Sr., M.D., chairperson of the AMA delegation, who noted that a report of the AMA annual meeting recently held in Chicago was included in the packet mailed to members. Dr. Malouf then introduced the newest member of the AMA Board of Trustees, Donald "Ted" Lewers, M.D., noting that Dr. Lewers is "one of our own." Dr. Lewers has been a Med Chi member for over 25 years and an active participant in AMA affairs. The House of Delegates extended its congratulations to Dr. Lewers.

Dr. Lewers thanked Drs. Henry Wagner and George Malouf for their hard work in helping him run for the AMA Board of Trustees. He also thanked Angelo J. Troisi, F.A.C.H.E., chief executive officer; Rose Matricciani, R.N., J.D., chief operating officer (COO); Carmine Valente, Ph.D., deputy executive director; Vivian Smith, director of public relations; and Arlene H. Whalen, administrative assistant to COO, for their contribution to his success during his campaign.

Dr. Lewers said it was important that members work together. He emphasized that physicians must be unified more than ever before because of health system reform, and offered whatever help he could give.

Dr. Snyder noted that Alex Azar, M.D. had been selected to serve as a member of the Health Care Access and Cost Commission (HCACC), which was established under the provisions of HB 1359. Dr. Azar was congratulated by the House of Delegates on his appointment.

Dr. Azar remarked that even though he is a Med Chi appointee and member, as a commissioner, he must vote for what is best for the citizens of Maryland, and what is best for all patients and for all physicians.

Dr. Snyder introduced David Doman, M.D., a member of the House of Delegates, who is running for a congressional seat in the eighth district. Dr. Doman asked the members for their support. He noted that he was an advocate for the patient and welcomed members' advice.

Health system reform

A representative from the AMA Department of State Legislation, Kelly C. Kenny, provided an overview of health system reform. Discussion centered on health system reform in other states. It was noted that the states will have to see what direction to take after the federal government comes out with its health system reform plan. She noted that a single, central health care authority or board inevitably appears in most major state health system reform proposals. Eight states have packaged computerized programs, and 40 states have passed some type of health system reform.

Amendments to HB 1359 "Health Care and Insurance Reform"

The president informed the House that 23 amendments were submitted by the May 21 deadline. During the past two and one-half months, the Executive Committee worked extremely diligently for approximately 25 hours during four meetings reviewing HB 1359 amendments. Dr. Snyder introduced Hilary O'Herlihy, M.D., chairperson of the Legislative Committee, and Angus Everton, Esq., Med Chi general counsel, who reviewed all submitted amendments.

Mr. Everton noted that an errata sheet had been added regarding amendments 2 and 9 and thanked Bernadette Lane, executive director, Baltimore City Medical Society (BCMS), for bringing the information to his attention. Mr. Everton also noted that voting would be by

consent calendar and that the Executive Committee recommendations on amendments 1–23 (minus 14) were included in the revised agenda. After the amendments were presented, the House moved to extract the following amendments: 2, 4, 7, 9, 11, 12, 20, and 23. The other amendments (1, 3, 5, 6, 8, 10, 13, 15–19, and 21) were approved to be submitted as recommended by the Executive Committee; Amendment 23 was approved not to be submitted as recommended by the Executive Committee.

Amendment 2 §19-1507(H)(1). A motion was made to support the primary #2 amendment, not the two alternate amendments presented. This was seconded and approved.

Amendment 4 §19-1509. It was noted that the payment system needed to be brought back in line with the legislative purpose to enable the HCACC to put a handle on outlyers. The amendment and the alternate amendment were explained. Persons of the same specialty group must be compared. It did not allow comparison across specialty groups, and this amendment would do so. It was noted that if someone wanted to amend the bill further to define specialty group to be no more than people within a certain practice—doctors as opposed to podiatrists—that would be acceptable. A question was posed regarding performance comparison in terms of specialty. An amendment was made and approved to include that a specialty group should be people within a certain practice. The amendment to the amendment was carried. The amended amendment was carried.

Amendment 7 §3-2A-02(c). It was noted that in the original HB 1359, the Maryland General Assembly included a "community standard of care" in return for removing the provisions in the practice parameter section that would have made them affirmative defenses in malpractice suits. People who testify in such cases would only be able to testify as to the standard of care prevailing in the community.

The suggested amendment was formulated to require that the expert actually reside in a community similar to that at issue in the case at which he or she may be testifying. It was noted that the definition of "community" was a problem because a physician in one specialty or section of a town might have a different standard than another physician in another area or practicing in another specialty. Therefore, it was thought that the fairest way to define community would be as "...an economically, demographically, and geographically separately identifiable population group." It was noted that Medical Mutual Liability Insurance Society of Maryland, Inc. (Med Mutual) is not in favor of having this type of amendment added to HB 1359. After some discussion, a motion was made to table this amendment until Med Chi could meet with Med Mutual and learn why it does not wish an amendment to be made. The motion passed 63 to 41 to table the amendment.

Amendment 9 §19-1507(a) and (b), §19-1515(a)(1). This amendment was designed to ensure that HCACC does not selectively pick the health care professions it wishes to regulate. As the bill is designed, however, HCACC could conceivably decide to regulate only a handful of professions, including or excluding physicians. Med Chi thought that everyone should be regulated.

The Baltimore County Medical Association (BCMA) presented two amendments. Because the bill uses the term "and office facilities" many places in the law, it was suggested to leave this in the present bill and move the bracket in Amendment 9 to "selected..." and on page 22, lines 20 to 42 of HB 1359, where it talks about variation in fees charged by physicians in offices, BCMA suggested that the word "physicians" be changed to "health care practitioners" for consistency.

Mr. Everton agreed that these two amendments were good amendments. He also thought that "health care practitioners" should be changed everywhere in the bill and hoped the House would agree. The House of Delegates approved the amendments to Amendment 9 submitted by BCMA.

Baltimore City Medical Society (BCMS) submitted an amendment to change the wording under paragraph (b)(1) "collect from **every health care practitioner** for each type of patient encounter **designated by the commission**." Mr. Everton noted that by putting the words, "designated by the commission" back in, it gave the HCACC the option of leaving some practitioners out. The House defeated the amendment. The amended Amendment 9 was approved by the House of Delegates.

Amendment 11 §19-1507(k), §19-1509(d)(4). Dr. Blumberg noted that he asked Amendment 11 to be extracted only to note a typographical error—line four should read "entire surgery and service." The House approved the amendment as amended.

Amendment 12 §19-1509(c)(2)(iii). It was noted that BCMA extracted this amendment because it thought it was difficult to define the word "reasonable" when referring to "the reasonable cost of bad debt and charity care...." BCMA thought that the word "reasonable" should be deleted. Mr. Everton did not think that deleting the word "reasonable" would cause a problem

and thought it was a good idea. The House of Delegates approved the amendment to Amendment 12 and approved the amended amendment.

Amendment 20 §19-1511(u)(6). BCMA was concerned about the collection of information. BCMA suggested that the words "published or disclosed" be changed to "published summary." The amendment was approved by the House of Delegates. The amended amendment was passed by the House.

Amendment 23 §702 (8)(1). Mr. Everton noted that the Executive Committee had recommended that this amendment not be approved for submission. Mr. Everton noted that there was a community rating provision in the health benefit plan, and BCMS has suggested that two parts of it be deleted. One part stated that there shall be community rating, except it may consider age and may consider location—one of four geographic groups around the state. It was noted that insurance would cost more for some people in some jurisdictions if the people were lumped into a statewide community rating or an age rating.

BCMS moved that in Section 702, paragraph 8(1), page 45 of the bill, the adjustment for age be eliminated. It was noted that new firms with new employees, who would probably be young, would have an edge over older firms with older employees, and this could increase the probability that older employees would lose their jobs because these employees could be costing a firm more.

Mr. Everton noted that by taking age out, Section 702 of the insurance code, which deals with community ratings, would read as follows: "A carrier may only adjust the community rate for geography based on the following contingent areas of the state: Baltimore Metropolitan, DC Metropolitan, Western Maryland, Eastern and Southern Maryland.... Rates for health benefit plans may vary based on family composition as approved by the commission..... Based on the adjustment allowed under subsection a(2) of this section a carrier may charge a rate that is 50% above or below the community rate...between July 1, 1994, and June 30, 1995; 40% above or below the community rate...between July 1, 1995, and June 30, 1996; 33% above or below the community rate...between 1996 and 1997; 16% above or below for plans delivered or renewed after July 1, 1997." Mr. Everton noted that the ultimate community rate allows a 16% floater. "On or before 1998, the commission shall submit a report to the governor. The report will be on the feasibility and desirability of establishing a pure community rate or obtaining an adjusted community rate." It was noted that Med Chi should try to have this part of the amendment changed to serve the older population.

Mr. Everton noted that it was not a good idea to entirely eliminate age because by doing that the rates for young families who were in need of insurance could be raised. The main people who cannot afford health care are younger consumers. If the ability of the carriers to differentiate on the basis of age is eliminated, it may hurt younger consumers rather than help them.

It was noted that this was an insurance charge issue, and not a medical issue, and that Med Chi should stay out of this realm. The AMA representative noted that the AMA refers to community adjustment but does not discuss the age issue.

The amendment from BCMS was adopted to delete age from the criteria of held insurance. An amendment to also delete geography was presented by BCMS. It was questioned how geography could be deleted and still retain a community rating system. It was noted that in many rural areas, physicians charge less than physicians in metropolitan areas because people in the rural areas normally are making less money. It was thought that the entire bill was contingent on community ratings.

It was noted that an affirmative vote would mean the bill was accepted as amended, and a negative vote would mean that it was not. A vote was taken on the amended amendment. The amended amendment was approved only as to eliminating age. It was requested that all the amendments as amended should be sent to the components when finalized.

❑ *Amendments not reviewed by Executive Committee*

The BCMA was concerned that amendments it had submitted were not being reviewed at this time. It was noted that BCMA submitted its amendments a month late for consideration for presentation at this meeting, and the Executive Committee had agreed that these amendments needed to be looked at more closely by general counsel and the Executive Committee in the same manner as all other amendments. Therefore, at both the June 24 and July 12 meetings, the Executive Committee did not think these amendments should be submitted to the House of Delegates for approval at this time.

Mr. Everton noted that many of the amendments were good amendments, but he needed time to review them. A question of time was brought up. It was the consensus of the House that amendments could be submitted up

until the Maryland General Assembly meets on HB 1359. Therefore, since BCMA did not submit its amendments on time for them to be reviewed and forwarded to the Executive Committee for consideration, the House of Delegates thought that the amendments could be reviewed by the Executive Committee at its next meeting.

❑ *Reference Committee report*

Murray Kalish, M.D., Reference Committee chairperson, gave the committee report. He noted the committee met on June 30, 1993, to discuss the two resolutions submitted by BCMA. The Reference Committee recommended that the first resolution be adopted, which read

Resolved, That the president of Med Chi appoint an ad hoc committee to study the feasibility, desirability, and advisability of a physician all-payer system and development of appropriate legislation, if recommended.

The House of Delegates concurred with the Reference Committee's recommendation. The chairperson then presented the second resolution from BCMA, which read

Resolved, That this House of Delegates directs the officers, Legislative Committee, and staff of the Medical and Chirurgical Faculty to work for the amendment or repeal of any section of current Maryland law that may establish a cap on fees, establish a fee schedule, or prohibit balance billing for any physician in Maryland without the express consent of the individual physician.

The Reference Committee recommended that the second resolution not be adopted. It was the committee's consensus that the wording of the resolution, which required opposition to legislation and regulations, would tie the hands of the officers, staff, and Legislative Committee in their legislative negotiations. Furthermore, the Reference Committee questioned the phrase "without the express consent of the individual physician" because it was impossible to canvass each individual physician in Maryland to determine his/her express consent in order to amend, repeal, or oppose legislation or regulations. In order not to limit Med Chi in its negotiations, and to preserve physicians' rights, the Reference Committee recommended that the word "oppose" in the resolution's first resolve be changed to "modify," and that the phrase "without the express consent of the individual physician," which appears in both resolves, be changed to "thereby preserving the physician's right to establish his/her own fees." The wording suggested by the Reference Committee was rejected by BCMA.

The House of Delegates voted to table the resolution by a majority.

❑ *Other business*

A question as to whether it was AMA policy to favor fee scheduling was asked. Paul A. Markowski, AMA, noted that Report UU, presented by the AMA Board of Trustees at the 1993 AMA annual meeting, was extremely watered down when it was presented to the AMA House of Delegates. This report will be presented again at the next AMA meeting. Dr. Lewers noted that the AMA's position was that it endorsed the concept of resource-based relative valve scales (RBRVS). Dr. Lewers thought this could be interpreted as an endorsement of a fee schedule. Dr. Lewers noted that RBRVS was moving through the private sector at a rapid rate, and most carriers are exploring its utilization and are implementing it in many areas. Dr. Lewers said that Report UU did not endorse a Medicare RBRVS, but that the private sector would work on RBRVS for the private sector.

Ad Hoc Committee on Legislative Enhancement

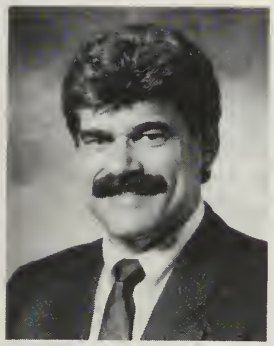
Dr. Snyder noted that he had appointed an Ad Hoc Committee on Legislative Enhancement, whose charge was to look at the legislative agenda, the lobbying issue, and where Med Chi was headed for next year. The chairperson is Jose M. Yosuico, M.D. This committee has met on three different occasions and has a done a tremendous job. The committee will present a report to Council. This committee has diligently studied the lobbying needs of Med Chi and has interviewed eight candidates for a position in "Government Relations." All individuals are highly qualified and were culled from a list of 26 individuals who sent their résumés. Because of confidentiality, names of individuals interviewed can not be revealed at this time. On June 12, the Executive Committee authorized the chief executive officer to meet and negotiate with the top two or three candidates and prepare a report for the Executive Committee as soon as possible. A question as to whether the person hired as a lobbyist would be hired full-time in-house was raised. Dr. Snyder said that the person chosen should be the best person possible, regardless of whether he or she were in-house or otherwise.

❑ *Adjournment*

There being no further business, the meeting was adjourned at 6:45 p.m.

Respectfully submitted,
Paul A. Stagg, M.D.
Secretary

Members in the News



J. LEONARD LICHTENFELD, M.D., a practicing internist in Baltimore, was elected to serve a one-year term as secretary-treasurer of the American Society of Internal Medicine (ASIM); ASIM represents more than 26,000 internists nationwide. First elected to the ASIM Board of Trustees in 1990, Dr. Lichtenfeld also serves on the society's Quality Assurance and Utilization Review Committee. A past president of the Maryland Society of Internal Medicine (MSIM), he was named the MSIM "Internist of the Year" in 1987. Dr. Lichtenfeld earned his bachelor's degree at the University of Pennsylvania and his medical degree from Hahnemann Medical College in Philadelphia. Certified by the American Board of Internal Medicine, he is on the staffs of Sinai Hospital, Johns Hopkins Hospital, and Northwest Medical Center. Dr. Lichtenfeld is an instructor at the Johns Hopkins University School of Medicine and fellow of the American College of Physicians. Long active in health policy, he currently serves on a physician panel developing mammography guidelines for the Agency for Health Care Policy Research. A member of the health advisory committee to Congressperson Ben Cardin, Dr. Lichtenfeld recently served as a physician reviewer for the President's Task Force on Health Care Reform. In 1992, he participated on a Health Care Financing Administration panel reviewing the codes used to determine Medicare's physician fee schedule.



THEODORE C. PATTERSON, M.D., was recently selected as a finalist in the 1994 American Academy of Family Physicians Family Doctor of the Year competition—one of only 10 physicians and the only one from Maryland receiving this honor. Awards criteria stipulate that the physician provide his or her community with compassionate,comprehensive, and caring medical service on a continuing basis, and that the physician be directly involved in community affairs and activities that enhance the quality of life in the physician's home area. Nominees must also serve as role models. Past president of the Baltimore County Medical Association (BCMA), Dr. Patterson is a graduate of Morgan State University, Howard University, and the University of Maryland School of Medicine. In 1992, he received the BCMA's Community Service Award; in 1990, he was named Dundalk's Citizen of the Year by the Optimist Club; and in 1969, he received the Dundalk Jaycees Distinguished Service Award.



DANIEL J. WINN, M.D., has been named medical director of CFS Health Group, Inc. effective September 1993. CFS Health Group owns and operates four Blue Cross and Blue Shield of Maryland health maintenance organizations (HMOs): CareFirst, FreeState, Potomac Health, and Delmarva Health Plan. A graduate of the University of Delaware, Dr. Winn received his medical degree from the University of Maryland. A board-certified specialist in internal medicine, Dr. Winn is a member of the Baltimore County Medical Association, the American College of Physician Executives, the American College of Physicians, and the Southern Medical Association. He is also a diplomate of the American Board of Internal Medicine. Prior to joining CFS Health Group, where he will oversee the areas of quality improvement, medical policy, utilization management, and credentialing, Dr. Winn served as medical director of Potomac Physicians, P.A. for five years and was medical director for Health America/ Maxicare—a national HMO.

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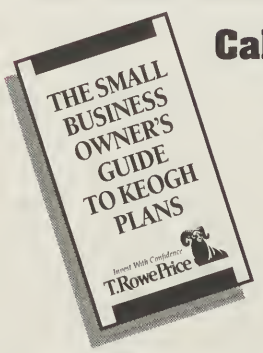
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In Memoriam

Nathan Block, M.D.

NATHAN BLOCK, M.D., an obstetrician from Pikesville, died October 3, 1993, of amyotrophic lateral sclerosis (Lou Gehrig's disease) at Northwest Medical Center. Dr. Block, a native of New York, earned his medical degree from the Long Island University College of Medicine in 1938. He was an intern in radiology and obstetrics at Beth Israel Hospital in Boston, completed a residency in surgery at Mount Sinai Hospital in New York, and moved to Baltimore in 1940 as a resident in obstetrics at Sinai Hospital. Dr. Block was an army medical officer at Letterman General Hospital in San Francisco during Word War II. A member of the Baltimore City Medical Society, the American Medical Association, the Southern Medical Association, and the American College of Obstetrics and Gynecology, Dr. Block had also been on the medical staffs at Sinai and St. Joseph hospitals and Franklin Square Medical Center. He retired in 1988 from a practice he began in 1943 in the Dundalk, Middle River, and Rosedale areas. Dr. Block was 78.

Arthur B. Cecil, Jr., M.D.

ARTHUR B. CECIL, JR., M.D., a general and thoracic surgeon from the Eastern Shore, died May 10, 1993, in Easton, Maryland. An emeritus member of Med Chi, Dr. Cecil was member of the Talbot County Medical Society. A resident in surgery in 1943 at the Johns Hopkins Medical Institutions, he was on the faculty in the Department of Medicine in 1960. Dr. Cecil was 51.

Nassar Javadpour, M.D.

NASSAR JAVADPOUR, M.D., an internationally known authority in urological oncology, died October 26, 1993, at Johns Hopkins Hospital from complications following cancer surgery. Born in Iran, Dr. Javadpour received his medical degree from the American Medical School in Iran in 1962. Following a surgical internship and residency at Chicago Medical College and a urological residency at the University of Minnesota Medical Center, he served as a staff urologist at the University of Chicago Hospital. Dr. Javadpour was an American Urological Association research scholar and visiting scientist at the Armed Forces Institute of Pathology before assuming the post of chief of urology at the National Cancer Institute. From 1985 to 1991, he was a professor of medicine at the University of Maryland Medical School, when he left to head the urology department at Maryland General Hospital. Dr. Javadpour had also served at Harbor Hospital Center. Active on editorial boards of six medical publications, Dr. Javadpour developed a substitute bladder for cancer patients and discovered the biological marker for testicular seminoma. Author of 12 books on urologic oncology, he had also filmed and edited 8 movies on testicular cancer. A member of 20 medical societies including the Baltimore City Medical Society, Dr. Javadpour was 56.

Bernard Kleiman, M.D.

BERNARD KLEIMAN, M.D., who was a pioneer in Baltimore in the use of a surgical procedure to replace the stirrup bone, died October 26, 1993, at his Pikesville home from amyotrophic lateral sclerosis (Lou Gehrig's disease). Born in Baltimore, Dr. Kleiman was a graduate of the Johns Hopkins University and the University of Maryland medical school. He completed an internship at St. Joseph Hospital and residencies at Washington University Hospital in St. Louis and Queens General Hospital in New York City. After serving in the Army Medical Corps, Dr. Kleiman began practicing at St. Joseph Hospital, where he was chief of the ear, nose, and throat department from 1950 to 1985, and president of the medical staff from 1979 until 1981. A licensed pilot, Dr. Kleiman was president of the Baltimore County Medical Association in 1987. He retired from practice in 1992. Dr. Kleiman was 79.

Ralph Stiller, M.D.

RALPH STILLER, M.D., a retired pediatrician from Silver Spring, died October 2, 1993, at Holy Cross Hospital of an aortic aneurysm. Born in New York, Dr. Stiller received his bachelor's and medical degrees from New York University. During World War II, he served in the Army Medical Corps in North Africa, Italy and France. He moved to the Maryland area to become a resident at Children's Hospital in the late 1940s. He subsequently joined the staff of Group Health Association and became head of its pediatrics department. Dr. Stiller maintained a private pediatric practice in Silver Spring from 1954 until his retirement in 1986. He had been a member of the medical staffs of Holy Cross Hospital, Children's Hospital, and Washington Adventist Hospital. A fellow of the American Academy of Pediatrics, Dr. Stiller was also a member of the Montgomery County Medical Society, the Montgomery

County Pediatric Society, and the American Medical Association. Dr. Stiller was 77.

Millard T. Traband, Jr., M.D.

MILLARD T. TRABAND, JR., M.D., who practiced medicine in West Baltimore and Baltimore County for 36 years, died October 10, 1993, at a hospital in Gloucester, Virginia, of complications from a broken hip. Born in Baltimore, Dr. Traband was a graduate of the pharmacy and medical schools of the University of Maryland. He completed an internship and residency at the University of Maryland Hospital. During World War II, he served in the Army Medical Corps, rising to the rank of captain. A fellow of the American Academy of Family Practice, Dr. Traband was also a member of the Baltimore County Medical Association, the Southern Medical Association, the American Medical Association, and the Pleximeter Club of Maryland (a medical study group). Dr. Traband, who retired in 1982, had served on the staffs of Maryland General Hospital and the Northwest Hospital Center, and had taught at the University of Maryland School of Medicine. A former head of the Maryland Society of Mayflower Descendants, Dr. Traband was 77.

No additional information was available at press time for the following members:

Ali H. Afrookteh, M.D.
Baltimore County, October 9, 1993

Thaddeus H. Elder, Jr., M.D.
Allegany County

Paul F. Guerin, M.D.
Baltimore County

John T. Smith, M.D.
Anne Arundel County, May 1, 1993 ■

Erratum

In the October 1993 *Maryland Medical Journal*, Lawrence W. Malin, M.D., was listed in "In Memoriam." Carl J. Houmann, M.D., writes that Dr. Malin is very much alive and well in Adelphi, Maryland, although Dr. Malin's wife, June, passed away a few months ago. The *MMJ* regrets the error.

DIRECTOR

Internal Medicine Residency Program

The Greater Baltimore Medical Center (GBMC), a 372-bed community teaching hospital located in suburban Baltimore is seeking a physician executive to provide effective leadership to the hospital's Internal Medicine Residency Program. Structured to meet new RRC standards, our primary care focused curriculum is designed to emphasize continuity, ambulatory, preventive and psychosocial aspects of the practice of medicine.

The Internal Medicine Residency Program, which is one of four residencies at GBMC, has 29 medical residents and a core faculty of five internists/educators.

The Director's responsibilities include curriculum development, administration and oversight of programs, clinical teaching and patient care.

We seek an enthusiastic, board certified internist with significant commitment to educational excellence, quality patient centered care and the training of physicians. Demonstrated teaching, administrative and residency experience is essential.

The successful candidate will enjoy a competitive salary with incentives and a full complement of benefits. If you have an interest in this opportunity, please call Tom Battles at 410/828-3649 or send a copy of your curriculum vitae to:

Thomas E. Battles
Director, Physician Recruitment
Greater Baltimore Medical Center
6701 North Charles Street
Baltimore, MD 21204

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Auxiliary

Mini-internship pilot program in Anne Arundel County

This past fall, the first Maryland mini-internship program was sponsored by the Anne Arundel County Medical Society and the Medical Society Alliance (formerly the Auxiliary) of Anne Arundel County (AACO). The AACO program, designed to promote communication between physicians and the people they say are shaping their lives (politicians, government officials, and consumer advocates), was patterned after a similar program sponsored by the American Medical Association (AMA) and closely followed the AMA guidelines. Susan Clark, one of the original drafters of the program, was kind enough to introduce the program to the AACO Medical Society.

After the board was sold on the program, Mary Morin, AACO Medical Society executive secretary, and I began planning. The Alliance's role was to provide support and follow-up and keep the program on track. Ms. Morin handled the administrative responsibilities, including sending the prepared letters from the AMA.

The next step was the establishment of a committee, which worked hard over a six-month period to plan the orientation dinner, the actual two-day internship, and the debriefing dinner. Dr. Raymond and Imelda Herzinger graciously hosted the orientation dinner, which was a great introduction for all participants.

The first program was purposely kept small—5 interns and 11 physicians participated. Interns included County Councilperson George F. Bachman, Jr.; Delegate John G. Gary, Jr.; Edna Butcher, state director of the American Association of Retired Persons; and County Health Officer Frances B. Phillips. Physicians represented emergency medicine, family medicine, surgery, and other specialties.

The interns spent part of two days at work with the physicians. Interns and physicians were able to share concerns and voice their opinions. The mini-internship program enabled participants to learn more about medicine, how the growth of managed care has changed medical practice, and how the practice of medicine will change as the result of health system reform.

The program's goal was to foster two-way communication between physicians and those interested and involved in health care decision making. It is one step in establishing long-term relationships that can ensure that physicians will be involved in health system reform efforts.

The program was well received. Comments included "It was very helpful to me," "It was a wonderful opportunity for the medical profession and average citizens to get to know each other better," and "The physicians were extremely helpful and patient; thanks for including me."

All participants thought the two-day schedule was an appropriate length of time for the internship, although some interns had difficulty scheduling that amount of time away from their own offices. Suggestions for possible participants for future mini-internship programs included malpractice lawyers, insurance company representatives, religious leaders, senior citizens, small business leaders, and television newscasters.

The AACO Medical Society and the Medical Society Alliance of AACO plan to have the program become a yearly event. Many AMA resources are available for counties that would like to host similar programs. If anyone would like additional information about the AACO program, please call me at 410-266-8230.

JOY EPSTEIN
Ms. Epstein is president-elect of the Medical Society Alliance of Anne Arundel County. ■

MARYLAND

The Auxiliary always welcomes new members.

Auxiliary members support the physicians and are recognized for their contributions to health, education, and the promotion of quality health care in Maryland.

For information on becoming a member, call JoAnn Troisi at Med Chi's Auxiliary office.
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1-800-492-1056 (toll free in MD)

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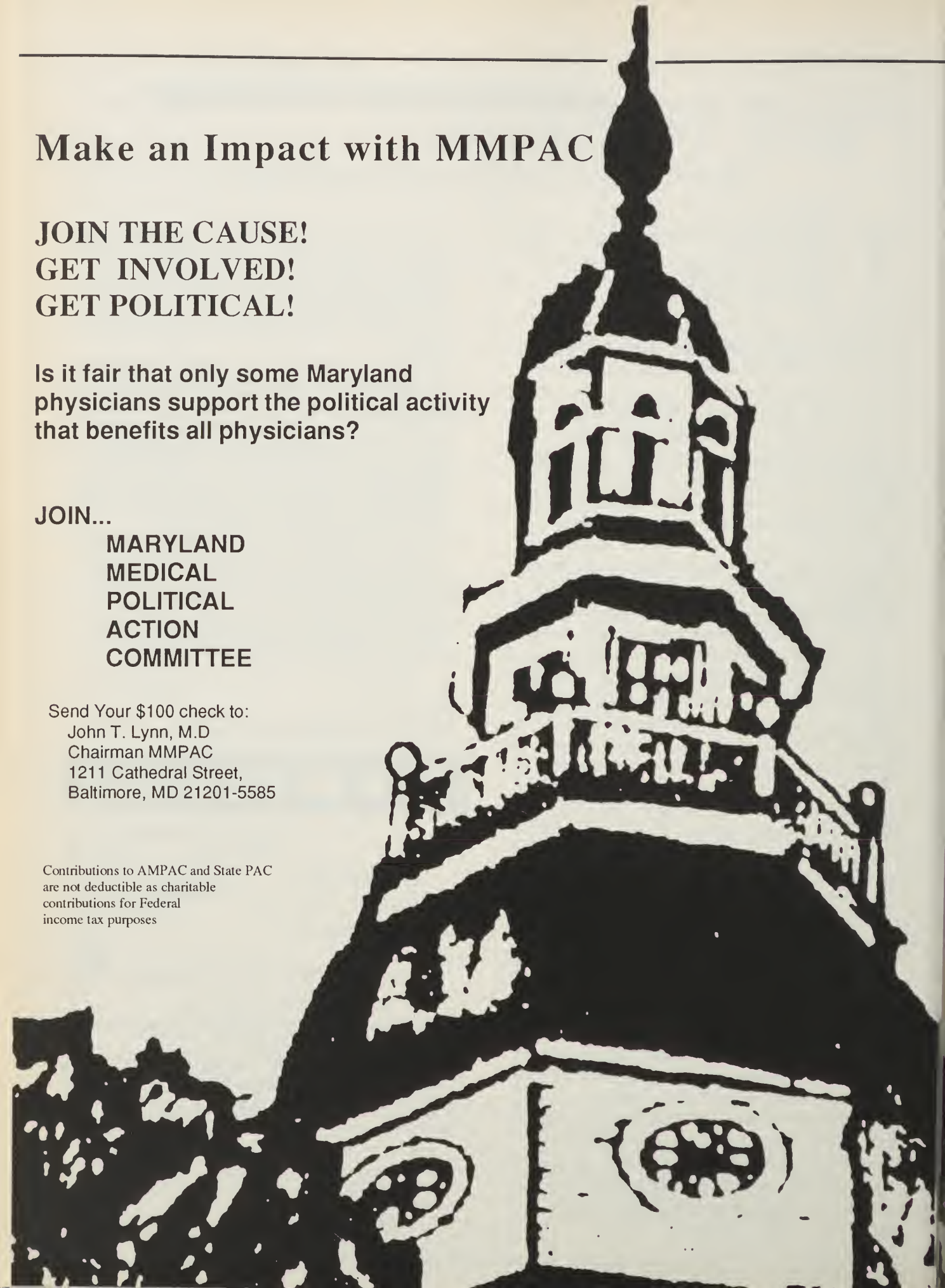
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A Message to my Patients about Maryland's Number One Public Health Problem

The Medical and Chirurgical Faculty of Maryland (state medical society) is part of a new coalition dedicated to fighting the leading cause of preventable death in our state: *Tobacco*. More of our citizens die each year from smoking-related illness than from alcohol, heroin, crack, homicides, suicides, car crashes, fires, and AIDS (acquired immunodeficiency syndrome) combined. Maryland now has the second highest cancer death rates in the country. Tobacco is also a leading cause of heart disease, stroke, amputations, bronchitis, and emphysema, and costs our state millions in wasted health care spending.

I believe the best way to save lives is to let our state legislators know that we as citizens are tired of having the tobacco industry determine our state laws. It is easy to contact the state senator and delegates representing your legislative district. The state Board of Elections (1-800-222-8683) will give you the number of your local elections board, and the names, phone numbers, and addresses of your state legislators. I am asking you to make a simple phone call to your state representatives. Photocopy and pass this notice on to a friend.

Tell your delegates that you feel strongly about the following set of principles endorsed by the Coalition for a Smoke-Free Maryland, which includes the state medical society, the American Lung Association of Central Maryland, the American Cancer Society—Maryland Division, the American Heart Association—Maryland Affiliate, and others. To find out how else you can help, call the coalition at 410-339-7108. Together, we can make a difference!

Statement of Principles

1. Children should be protected by the enforcement of laws against selling tobacco to minors. Laws should include increasing fines and mandating eventual suspension and revocation of licenses for those who repeatedly sell tobacco to minors.
2. Children should be protected by limiting the placement of tobacco vending machines.
3. Employees should be protected by law in their right to a smoke-free work environment.
4. The public should be protected by making enclosed public places free of environmental tobacco smoke.
5. The state should not preempt counties and municipalities from enacting stronger legislation.
6. The state should increase taxes on all tobacco products.

The Coalition for a Smoke-Free Maryland Fact Sheet

Tobacco represents the leading cause of preventable death in Maryland and in the United States. It is our country's most important public health problem. Tobacco annually kills over 400,000 people in the United States, more than heroin, alcohol, crack, homicides, suicides, car crashes, fires, and AIDS (acquired immunodeficiency syndrome) combined. Our state now has the second highest cancer rates in the country. In addition to cancer, tobacco is also a leading cause of heart disease, stroke, bronchitis, emphysema, amputations, gastric disease, and other diseases.

The great majority of smokers became addicted before the age of 18. One million children and teenagers become addicted each year. This illegal teenagers' market represents $1.7 billion in annual United States sales and is the way the tobacco industry replaces the 1,200 smokers who die each day. This is why the industry has fought in Maryland to perpetuate the toothless law that has made it illegal to sell tobacco to minors for a century, but which is never enforced.

Enforcement of these laws would lead to significantly lower rates of teenage tobacco addiction. We do not allow our children to buy liquor; we should not let them become addicted to tobacco.

The United States Environmental Protection Agency (EPA) recently declared second-hand smoke or environmental tobacco smoke (ETS) to be a class A carcinogen—in the same class as asbestos and radon. In July 1993, the EPA officially recommended that all buildings open to the public have separately ventilated smoke- free areas, or be completely smoke free. The United States surgeon general has reported that over 50,000 nonsmokers die annually from other people's tobacco smoke. That annual figure almost equals the number of Americans killed (58,000) in the eight years of the Vietnam conflict.

Surveys have shown that virtually 100% of vending machines allow cigarette sales to minors. The earlier smokers becomes addicted, the less likely it is that they will be able to quit. If individuals can make it through their teenage years without smoking, however, it is likely that they will never smoke.

Increasing the tobacco tax leads directly to a decreased incidence of smoking, especially among young people. Each 26.5 cent tax raise would bring in over a hundred million dollars in state revenues. Lower smoking rates would save even more, as Maryland spends over $500 million annually on smoking-attributable health care costs.

Nicotine is more addictive than heroin. It is the most addicting drug known. Nine out of 10 children who start smoking will become nicotine addicts, compared with 1 out of 6 for crack.

The Coalition for a Smoke-Free Maryland
Suite 206
7401 Osler Drive
Towson, MD 21204
410-339-7108

American Medical Association

Physicians dedicated to the health of America

For Your Benefit

Clinton's plan has AMA elements, yet medicine cannot endorse it

The AMA neither endorsed nor opposed President Clinton's entire health system reform plan, saying it will continue to maintain dialogue with the administration, congressional leaders, and Republican and Democrat sponsors for other proposals to ensure nonpartisan discussions result in final legislation "that puts our patients first."

"We disagree with certain of the president's strategies to achieve commonly shared goals, and we will neither endorse nor oppose the president's preliminary plan in its entirety," the AMA said.

Although it welcomed Clinton's affirmation of many AMA reform principles, the Association warned that the plan's reliance on price controls and overregulation, and its new layers of governmental bureaucracy will limit patient and physician choices, lessen the quality of medical services and undermine the mutual trust between patient and physician.

"While the president proposes rigid spending limits that would also limit resources for patient care, the plan does not consider adequately other major cost-saving areas like liability and antitrust reform," the AMA said.

Financing and implementation issues continue to cause concern as Clinton did not clearly address how he plans to finance reform and that his timetable to enact the plan may be "too aggressive."

The Association cautioned that "heavy reliance on cuts in Medicare and Medicaid for financing is an unrealistic, short-term solution that could threaten medical services for the poor and elderly in the future."

AMA stated Clinton may be creating expectations that cannot be met.

"If anticipated savings fail to materialize from his reform plan, deep reductions in medical services may follow, as many leading economists warn, thus defeating reform's primary purpose," the AMA said.

Actual legislative specifications of Clinton's plan are expected in October. Clinton's speech "is just the beginning of the most important domestic debate of our lifetime," the AMA said.

Dialogue between the administration and AMA will continue during the next stages of the reform process.

The Association also is meeting with congressional leaders and sponsors of Republican and Democratic system reform plans.

Prepared by the AMA Department of Communications Services. For information, call 800 AMA-3211, ext. 4416.

Clinton answers AMA's 10 questions on health system reform

President Clinton answered the AMA's 10 questions on health system reform and included his responses in the White House press kit handed out prior to his congressional speech.

The 10 questions, a handout prepared by the AMA entitled "Is the Clinton proposal for health reform good for you and your family?" originally was designed for physicians to hand out to patients and post in reception areas to encourage open discussion between them.

AMA responses to the 10 questions are included in the all-physician mailing.

AMA directs concerns to Congress; sends analysis of Clinton proposal

The AMA told Congress that organized medicine remains "extremely concerned that any approach not rely too heavily on new and complicated levels of government regulations and restrictive cost containment."

AMA directed this message to every U.S. congressional member in a letter outlining medicine's concerns with the president's health system reform plan.

"We cannot and will not endorse any proposal that could shortchange our patients," the AMA said. This AMA message is timely as Congress begins to analyze and debate the Clinton administration's plan and other system reform proposals.

"Health system reform should not install new structures or limitations that could artificially limit patient choice, do too little to ensure high-quality medicine or rob patients of the security of established patient-physician relationships," said AMA EVP James S. Todd, MD.

An analysis was sent with the letter, highlighting areas of AMA agreement and disagreement with the Clinton plan. It cited "substantial differences with certain approaches in the president's plan."

RUC recommends case management, prolonged service updates

The AMA's Relative Value Scale Update Committee, RUC, provided HCFA with final recommendations for 243 CPT codes that currently have no assigned value in the Proposed Rule as published in the July 14 *Federal Register.*

New code recommendations for case management and prolonged physician services address two important developments in today's primary care medical practice that will improve the quality of care while reducing its costs.

"Care Plan Oversight" codes will fill a major gap in the coding system by allowing physicians to report case management of homebound or nursing home patients who, because of disability, frailty or distance, cannot get to the office. They also are used for the patient whose condition frequently changes and requires substantial care oversight.

"Prolonged Physician Services" codes will provide incentives for physicians to provide care in the most appropriate setting, reducing frequency of expensive emergency department visits and hospital admissions.

HCFA also intends to provide national relative values for additional non-Medicare covered services, such as pediatrics and preventive medicine.

Prepared by the AMA Department of Communications Services. For information, call 800 AMA-3211, ext. 4416.

COMING OUT OF THE DARK

Med Chi's Physician Rehabilitation Committee deals with the substance abuse and mental health problems of Maryland physicians, with a confidential and nondisciplinary focus...Addiction, Marital/Family Conflicts, Psychiatric Illness, Organic Impairment, Physical Handicap...If these problems exist, we can help find the solution. Call us.

The Physician Rehabilitation Committee of Med Chi is available to all Maryland physicians, and their families. The Committee is NONDISCIPLINARY and information is kept CONFIDENTIAL. If you, a colleague, or family member is in need of our services call (410)962-5580 or call toll free (800)992-7010, or leave a message 24 hours a day, 7 days a week at (410)727-1020.

HELPING IS OUR BUSINESS...All donations to the Physician Rehabilitation Committee are used for the delivery of services to Maryland physicians in need of help. If you wish to help further the work of the Committee through a tax deductible donation send your check to: The Medical and Chirurgical Faculty Charitable/Educational Foundation, 1204 Maryland Avenue, Baltimore, Maryland 21201 Please note on your donation: "Physician Rehab"

Medical and Chirurgical Faculty of Maryland

Physician Rehabilitation Committee

The Maryland Medical Journal (MMJ) *is a monthly publication of the Medical and Chirurgical Faculty of Maryland. The journal's goals are educational and informative: the publishing of scientific articles (original research, case studies, and review articles) and other technical information, as well as editorials, letters, special articles (evaluations, position papers, reviews of nonscientific subjects),*

Information for AUTHORS

membership and legislative news, continuing medical education notices, and programs and policies of the faculty.

- ***Letter of transmittal***—The letter of transmittal, which all authors must sign, should include the full names, degrees, titles, and affiliations of all authors, and the name, address, and phone number of the author to whom reprint requests and correspondence should be sent.

  The letter should include a statement to the effect that all authors have participated in the conception and design of the work and in the writing of the manuscript, and that they take public responsibility for it. The authors should attest to the validity and legitimacy of the data, and acknowledge that they have reviewed the final version of the manuscript and approve it for publication.

  In addition, the letter must include a paragraph that transfers copyright ownership to the *MMJ* in the event that the work is published.

- ***Manuscript preparation***—Manuscripts should be submitted to Editor, *MMJ*, 1211 Cathedral Street, Baltimore, MD 21201-5585. Manuscripts must be original material not previously published and not under consideration by another publication. An abstract of 100 to 300 words is required.

  All material, including references, tables, and legends, must be double-spaced. Pages should be numbered. (All abbreviations should be spelled out on first use.) The original manuscript plus one copy should be submitted on standard (8.5" x 11") bond paper. If at all possible, an IBM-compatible disk should be included, with the manuscript entered in a WordPerfect, Multimate, Wordstar, or ASCII format; the transmittal letter should identify the format used.

- ***References***—References are limited to those citations noted in the text. References should be numbered consecutively as they appear in the text and should be kept to a minimum (fewer than thirty-five). Personal communications and unpublished data are not acceptable. At a minimum, references should include names of all authors, complete title of the article cited, name of journal abbreviated according to *Index Medicus* (if abbreviation is not known, journal name should be spelled out fully), year of publication, volume number, and first and last page numbers. Sample references are as follows:

  1. Stevens MB. The clinical spectrum of SLE. Md Med J 1991; 10:875–85.
  2. Ropes MW. Characteristics, manifestations, and pathologic findings. In: Ropes MD, ed. Systemic Lupus Erythematosus. Cambridge, MA: Harvard University Press. 1976; 50–4.

- ***Tables***—Tables should be typed on separate sheets of paper, be numbered, and have a brief descriptive title. Data presented in tables should be self-explanatory and should supplement, not duplicate, the text; the Editor reserves the right to edit tables. Authors should be sure that statistics are consistent in both tables and text.

- ***Illustrations***—Illustrations include material that cannot be set in type. Photographic material must be submitted as high-contrast, glossy prints. Drawings and graphs must be done professionally in india ink on high-grade white drawing paper or be computer generated. Identification—including figure number, the title of manuscript, the name of corresponding author, and arrow indicating top—should be typed on a gummed label and affixed to the back of each illustration. Legends for illustrations should be typed on a separate page with numbers corresponding to those on the photographs or drawings. Recognizable photographs of patients are to be masked and should carry with them written permission for publication. Cost of printing color photographs must be borne by the author.

Checklist

- ☐ Original manuscript and one copy.
- ☐ IBM-compatable disk in WordPerfect, Multimate, Wordstar, or ASCII.
- ☐ Everything double-spaced.
- ☐ Letter of transmittal, signed by all authors, that includes release of copyright, statement of authorship responsibility, title and affiliation of all authors, and identification and phone number of corresponding author.
- ☐ Abstract of 100 to 300 words.
- ☐ Permission-to-borrow letters for any previously published illustrations or tables

- ***Permissions***—Material taken from other sources must be accompanied by written permission from both author(s) and publisher allowing the *MMJ* to reproduce the information/figure.

- ***Editorial responsibility***—All manuscripts are acknowledged upon receipt. They are subject to peer review by an editorial board and, at times, by guest reviewers in appropriate fields of medicine, to determine the originality, validity, and importance of the content and conclusions. Authors are usually notified of the status of their papers (acceptance, revision, or rejection) within 4 to 8 weeks of receipt; however, longer delays are sometimes unavoidable. Reviewers' comments will be returned with rejected manuscripts at the discretion of the Editor. All guest reviewers will remain anonymous.

  Accepted manuscripts become the permanent property of the *MMJ* and are subject to copy editing. (The *Chicago Manual of Style* and the unabridged *Random House Dictionary of the English Language* are used as style guides.) The corresponding author is sent a reprint order form and galley proofs. S(he) then has 48 hours in which to make minor changes and clear all corrections and changes with co-authors; if proofs are not returned by the specified date, they will be considered approved as typeset. ■

The Johns Hopkins Medical Institutions

All courses at the Thomas B. Turner Building unless otherwise indicated. For information on continuing medical education activities, contact the Office of Continuing Education, 720 Rutland Ave., Baltimore, Maryland 21205 (410-955-2959).

Ethics and politics related to clinical trials. Cat 1 AMA/PRA credits available. Fee: TBA. **Nov. 3–4**

Topics in ambulatory medicine VI. 20.5 Cat 1 AMA/PRA credits; 17 AAFP prescribed hours. Fee: $490 physicians; $290 residents, fellows, and allied health professionals with letter from department chairperson verifying status. **Nov. 3–5**

Progress in pediatrics. 11 Cat 1 AMA/PRA credits. Fee: $140 physicians; $80 residents and fellows. **Nov. 5–6**

Update on sinusitis. Cat 1 AMA/PRA credits available. Fee: TBA. **Nov. 8**

Neurology for the primary practitioner. 6 Cat 1 AMA/PRA credits; 6 AAFP prescribed hours. Fee: $125 physicians; $75 residents, fellows, and allied health professionals. **Dec. 11**

Excimer laser with lab workshop. Fee: Free. **Dec. 11**

Radial keratotomy wet lab workshop. Fee: Free. **Dec. 11**

Basic endoscopic sinus surgery. 19 Cat 1 AMA/PRA credits: lab and lectures only; 14.5 Cat 1 AMA/PRA credits: lectures only. Fee: $1,250 labs and lectures; $295 lectures only. **Jan. 6–7**

Advanced endoscopic sinus surgery. 9 Cat 1 AMA/PRA credits: labs and lectures; 6 AMA Cat 1 AMA/PRA credits: lectures only. Fee: $1,050 labs and lectures; $295 lectures only. **Jan. 8**

Advances in cardiac diagnosis and treatment 1994. Cat 1 AMA/PRA credits available. Fee: TBA. **Jan. 20–21**

1994 update in the management of age-related macular degeneration (optional fluorescein angiography workshop). 8.5 Cat 1 AMA/PRA credits: one-day course; 15.5 Cat 1 AMA/PRA credits: two-day course. Fee: $225 physicians; $100 residents, fellows, and allied health professionals; $550 lectures and optional lab course. **Jan. 21–22**

Geriatrics symposium: 1994 a board review. 37.25 Cat 1 AMA/PRA credits. Fee: $595. **Jan. 24–28**

The cycle of sexual trauma: Treating the victim and treating the offender. 18 Cat 1 AMA/PRA credits. Fee: $300 physicians; $275 groups of three or more on one check or credit card. **Feb. 10–12**

PET and SPECT imaging in oncology. 16 Cat 1 AMA/PRA credits. Fee: $495 physicians; $395 residents, fellows, and allied health professionals. **Mar. 9–12**

International conference on crystalline silica health effects: current state-of-the-art. Fee: $450. **Apr. 18–20**

35th annual postgraduate institute for pathologists in clinical cytopathology. Course A (Home study). Preparation for Course B. **Mar.–Apr.**

35th annual postgraduate institute for pathologists in clinical cytopathology. Course B 136 Cat 1 AMA/PRA credits. **Apr. 28–29**

Advanced pediatric life support courses. 20 Cat 1 AMA/PRA credits; 18.5 AAFP pescribed hours; 20 AAP credit hours; 17 ACEP credits. Fee: $525. **June 13–15**

The Johns Hopkins Medical Institutions (continued)

Continuously throughout the year

Visiting preceptorship in pediatric critical care medicine. Ongoing five-day preceptorship by appointment. 40 Cat 1 AMA/PRA credits. Fee: $600.

The department of radiology and radiological sciences offers several courses in abdominal and obstetrical ultrasound. Info: P. Williams, 410-955-3169.

Visiting physicians. Offered throughout the year for experience in the lab and participation in read-in sessions; by appointment only. 40 Cat 1 AMA/PRA credits. Fee: $500.

Johns Hopkins medical grand rounds. Accredited audiovisual continuing education series of case discussions for clinicians; 30 topics per year in five bimonthly programs. Individual and group subscriptions. 40 Cat 1 AMA/PRA credits. Info: 410-955-3988.

University of Maryland

For each course, additional information may be obtained by contacting the Program of Continuing Education, University of Maryland School of Medicine, Room 14-011, BRB, 655 W. Baltimore St., Baltimore, Maryland 21201 (410-328-3956) or by calling the phone number listed after a specific program. FAX 410-328-3103.

R. Adams Cowley 16th annual national trauma symposium, at the Hyatt Regency, Baltimore, Maryland. Info: 410-328-2399. **Nov. 16–20,1994**

Miscellaneous meetings

Cancer in women conference, at the Greater Baltimore Medical Center (GBMC), Baltimore, Maryland. Info: Celeste Morrissey, 410-828-3670. **Nov. 4 & 11**

The future of integrated health care systems conference, sponsored by The Healthcare Forum, Inova Health System, and KPMG Peat Marwick, at the Hyatt Regency, Reston, Virginia. 13.25 Cat 1 AMA/PRA credits. Info: 415-421-8810. **Nov. 8–11**

Interdisciplinary approach to the diagnosis and management of endocrine disorders, sponsored by the George Washington University Medical Center at the Sheraton City Centre Hotel, Washington, DC. 13.5 Cat 1 AMA/PRA credits. Fee: $195 physicians; $150 allied health professionals; $50 residents. Info: Daniel Reichard, 202-994-4285. **Nov. 12–13**

Mammography, sponsored by the George Washington University Medical Center, at the Calverton Holiday Inn in Beltsville, Maryland. 15 Cat 1 AMA/PRA credits. Fee: $250 ACR chapter members; $325 others. Info: Maria Gorrick, 202-994-4285. **Nov. 19–21**

Cardiac auscultation for physician assistants, nurse practitioners, and cardiac nurses, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. **Dec. 1–3**

The 26th annual New York cardiovascular symposium, sponsored by the American College of Cardiology. Info: 800-257-4739. **Dec. 2–4**

Fourth annual maternal and child health update, cosponsored by the Maryland Department of Health and Mental Hygiene, Local and Family Health Administration, Office of Maternal Health and Family Planning , and Maryland Coalition for Healthy Mothers and Healthy Babies, at the University of Maryland, College Park, Adult Education Center. Info: 1-410-225-6726. **Dec. 3**

Miscellaneous meetings (continued)

Twenty-first annual Williamsburg conference on heart disease, sponsored by the American College of Cardiology, in Williamsburg, Virginia. 19 Cat 1 AMA/PRA credits. Info: 1-800-257-4739. — **Dec. 5–8**

Interpretation and treatment of cardiac arrhythmias, sponsored by the American College of Cardiology, in Philadelphia, Pennsylvania. Info: 1-800-257-4739. — **Dec. 6–8**

Advanced echocardiography: Case studies and concepts, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. — **Dec. 13–15**

The role of echocardiography/Doppler in clinical decision making, sponsored by the American College of Cardiology, at the Heart House Learning Center, in Bethesda, Maryland. Info: 1-800-257-4737. — **Jan. 10–12**

Molecular biology for the cardiologist, sponsored by the American College of Cardiology, at the Heart House Learning Center, in Bethesda, Maryland. Info: 1-800-257-4737. — **Jan. 19–21**

Second annual mid-winter conference, sponsored by the Maryland Academy of Family Physicians, in Rockville, Maryland. 10 Cat 1 AMA/PRA credits; 10 AAFP prescribed hours. Fee: $100 members; $150 nonmembers; $65 paramedicals; no charge for residents, medical students, MAFP retired and life members. Info: William P. Jones, M.D. 410-7474-1980. — **Jan. 22–23**

The trials of cardiology. Sponsored by the American College of Cardiology, at the Heart House Learning Center, in Bethesda, Maryland. Info: 1-800-257-4737. — **Jan. 24–26**

Cardiovascular conference at Snowshoe, sponsored by the American College of Cardiology, in Snowshoe, West Virginia. 15.5 Cat 1 AMA/PRA credits. Info: 800-257-4739. — **Jan. 31–Feb. 2**

The cardiac cath lab of the 90s: Preparing for the future, sponsored by the American College of Cardiology, at the Heart House Learning Center, in Bethesda, Maryland. Info: 1-800-257-4737. — **Jan. 31–Feb. 2**

46th annual meeting and scientific session, sponsored by the Maryland Academy of Family Physicians, in Ocean City, Maryland. 41.25 Cat 1 AMA/PRA credits; 41.25 AAFP prescribed hours. Fee: $240 members; $275 nonmembers; $135 paramedicals; No fee for residents, medical students, MAFP retired and life members. Info: Richard Colgan, M.D., 410-747-1980. — **May 10–15**

Medical and Chirurgical Faculty of Maryland annual meeting, at the Ramada Convention Center, Hagerstown, Maryland. Cat 1 AMA/PRA credits available. Fee: Free for Med Chi members. Info: Joan Mannion, 410-539-0872 or 800-492-1056. — **May 12–14**

Psycho-economics: clinical psychiatry and health care reform in the 90s, sponsored by the American Psychiatric Association, in Baltimore, Maryland. 34 Cat 1 AMA/PRA credits. Info: 202-682-6174. — **Oct. 8–12, 1994**

Continuously throughout the year

Fluorescein angiography conference, sponsored by the Retina Center, St. Joseph Hospital, Baltimore, Maryland, first and third Mondays of each month; 8:00-9:00 am. Fee: none. Info: R. Classon, 410-337-4500.

Shady Grove Adventist Hospital

9901 Medical Center Drive, Rockville, Maryland. Info: 301-279-6115.

The nervous stomach	**Nov. 4**
New Maryland Health Care Decisions Act and other ethical issues	**Nov. 11**
Asthma management from the patient's standpoint	**Nov. 18**
Malpractice update	**Dec. 2**
Repetitive motion disorders	**Dec. 9**
Sorting it all out	**Dec. 16**

PHYSICIAN'S RECOGNITION AWARD

During September 1993, the physicians listed below received the American Medical Association (AMA) Physician's Recognition Award. Established in 1968, the award's purpose is to encourage physician participation in continuing medical education and to recognize those physicians who have voluntarily completed programs of continuing medical education.

Eugene L. Arnold
Gene Francis Ashe
Robert Emil Badwey
George Milton Boyer
Thomas Edward Carter
Jerome J. Coller
Robert Jay Ginsberg
Barry Steven Gold
Stephen Alan Goldman
Kip R. Hartman
Chang Wuk Kang
Bruce Allen Kaup
Michael James La Penta
James Malcolm Madsen
Irwin Henley Marill
Rona K. Nakamoto
Abdul Nayeem
John Walter Payne
Robert Stephen Perlstein
David Nelson Pfohl
Daniel Rosenblum
Otto Roza
Donald Lee Sturtz
Julia W. Tossell
Hamid Towhidian
Lewis Rhodes Townsend
Emily Anne Ulmer

William Donald Schaefer - Governor of Maryland

DHMH Maryland Department of Health & Mental Hygiene

Nelson J. Sabatini - Secretary
Department of Health & Mental Hygiene

J. Mehsen Joseph, PhD - Director
Community Health Surveillance & Laboratories Admin

Ebenezer Israel, MD, MPH- Director
Epidemiology & Disease Control Program

EPIDEMIOLOGY & DISEASE CONTROL PROGRAM
201 W. Preston Street, Baltimore, Maryland 21201 (410)225-6700

November, 1993
Revised Regulations On Selected Communicable Diseases

On July 5, 1993, the amendments to Code of Maryland Regulations, Summary of New Regulations (COMAR) 10.06.01 Communicable Diseases became effective. Below is a summary of the major changes:

IMMUNIZABLE DISEASES

- Adds requirements for immunity to measles and rubella for new hospital workers working 20 hours per week or more ("immunity" defined as one dose of vaccine after age 12 months or proof of immunity by blood test)

- Requires physicians to offer pneumococcal vaccine to those at increased risk or to refer to health care provider who has agreed to administer pneumococcal vaccine

AIDS/HIV

- Defines "symptomatic human immunodeficiency virus (HIV) infection;" this term was not previously defined in regulation

  Note: generalized lymphadenopathy in an otherwise asymptomatic patient is not reportable but symptomatic HIV infection and AIDS are reportable

- Requires a physician in attendance upon an individual with HIV infection to provide or to arrange for the provision of an evaluation and appropriate therapy for tuberculosis infection or disease

TUBERCULOSIS

- Adds a provision for medical supervision of those with tuberculosis who have not received adequate therapy

- Requires a physician in attendance upon an individual with HIV infection to provide or to arrange for the provision of an evaluation and appropriate therapy for tuberculosis infection or disease

ENTERIC DISEASES

- Changes the requirement of negative stool cultures after salmonellosis and shigellosis from three to two in children attending child care facilities, and adults working in occupations with risk of transmission

- Eliminates the requirement for testing urine specimens in persons with typhoid fever

- Requires a health officer:
  - to supervise a case of typhoid fever until Salmonella typhi-free, and until at least one month after onset
  - to notify carriers of the availability of treatments that may eliminate S. typhi carriage

SEXUALLY TRANSMITTED DISEASES (STD)

- Limits the requirement for follow-up of STDs to syphilis

- Adds provisions concerning congenital syphilis (testing, treatment, reporting)

Veterinary Public Health

- Restricts sale of turtle eggs and turtles less than 4" carapace length

- Specifies certain information to be made available at the sale of pets

Selected Revised Sections of COMAR 10.06.01, Communicable Diseases.

.12 Measles (Rubeola).

D. Proof of Immunity for Hospital Workers.

(1) A worker born after 1956 working at least 20 hours each week who is newly retained as medical staff, a direct or contractual employee, or a volunteer of a hospital classified as a "general hospital" under Health-General Article, §19-307, Annotated Code of Maryland, shall have documentation of receipt of one dose of live measles virus vaccine after becoming 1 year old or proof of immunity by blood test for antibody to rubeola. The hospital shall keep the measles vaccination or immunity status of each worker on file.

(2) Exemptions.

(a) A hospital shall grant a medical exemption for any worker who presents a written statement from a licensed physician or a health officer indicating that immunization against measles is medically contraindicated or detrimental to the worker's health. The statement shall indicate whether the exemption should be permanent or temporary. If the exemption is temporary, the statement shall indicate the date on which the worker is to receive the immunization. A hospital shall withdraw a temporary medical exemption of the day following that date. If the exemption is permanent, the hospital shall maintain a record of the worker's measles antibody test results.

(b) If a worker objects to an immunization upon the grounds that it conflicts with the worker's bona fide religious beliefs and practices, the hospital shall grant a religious exemption to the worker for the immunization. The hospital shall maintain a record of the worker's measles antibody test results.

.12-1 Pneumococcal Disease.

A. There is no control of a case or contacts.

B. Vaccinations of an Individual at Risk.

(1) An individual at increased risk of pneumococcal disease includes an individual:

(a) With anatomic or functional asplenia;

(b) With sickle cell disease;

(c) With human immunodeficiency virus infection;

(d) With chronic heart, lung, liver, or renal disease;

(e) With diabetes mellitus;

(f) Who is 65 years of age or older; or

(g) Who is a resident of a long term care facility.

(2) A physician in attendance upon an individual at increased risk of pneumococcal disease shall:

(a) Educate that individual or the individual's legal guardian on the availability of pneumococcal vaccine; and

(b) Administer pneumococcal vaccine to a consenting individual who has no contraindications and who is at increased risk of pneumococcal disease, or refer the individual to a health care provider who has agreed to administer pneumococcal vaccine to an individual at increased risk of pneumococcal disease.

.15 Rubella (German Measles).

D. Proof of Immunity for Hospital Workers.

(1) A worker born after 1956 working at least 20 hours each week who is newly retained as medical staff, a direct or contractual employee, or a volunteer of a hospital classified as a "general hospital" under Health-General Article, §19-307, Annotated Code of Maryland, shall have documentation of receipt of either one dose of live rubella virus vaccination on or after becoming 1 year old or proof of immunity by blood test for antibody to rubella. The hospital shall keep the vaccine or immunity status of each worker on file.

(2) Exemptions.

(a) A hospital shall grant a medical exemption for any worker who presents a written statement from licensed physician or a health officer indicating that immunization against rubella is medically contraindicated or detrimental to the worker's health. The statement shall indicate whether the exemption should be permanent or temporary. If the exemption is temporary, the statement shall indicate the date on which the worker is to receive the immunization. A hospital shall withdraw a temporary medical exemption on the day following that date. If the exemption is

permanent, the hospital shall maintain a record of the worker's rubella antibody test results.

(b) If a worker objects to an immunization upon the grounds that it conflicts with the worker's bona fide religious beliefs and practices, the hospital shall grant a religious exemption to the worker for the immunization. The hospital shall maintain a record of the worker's rubella antibody test results.

.16 Salmonellosis.

A. Control of a Case.

(1) A case may not attend a child care facility until the:

(a) Case's fecal cultures are Salmonella-free on two consecutive specimens collected not less than 24 hours apart and not sooner that 48 hours following discontinuation of antibiotics (if antibiotics have been given), or . . .

(2) A case with or without diarrhea may not participate in an occupation involving food handling, patient care, or care of young children or the elderly until:

(a) Fecal cultures are Salmonella-free on two consecutive specimens collected not less than 24 hours apart and not sooner than 48 hours following discontinuation of antibiotics (if antibiotics have been given); or . . .

.17 Sexually Transmitted Disease Syphilis.

A. Control of a Case.

(1) A physician in attendance upon an individual who appears to have, or who has syphilis in a stage which is or may become communicable, shall instruct the individual in the use of any measure, and render any treatment which may be necessary to prevent the spread of the disease.

(2) An individual under medical observation for diagnosis or under treatment for syphilis, shall remain under medical supervision until the: . . .

(b) Syphilis, if present, has been reported to the health officer; and . . .

(3) A physician in attendance shall report to the health officer immediately and in writing the name and address of an individual who is:

(a) Receiving or has received treatment for syphilis; or

(b) Under medical observation for diagnosis or treatment of syphilis in an infectious or potentially infectious stage, who fails to return for observation or treatment within 1 week of the date of a missed appointment, and is not known to the attending physician to be under medical observation or treatment elsewhere for this disease.

B. Control of Contacts.

(1) A physician in attendance upon a patient having syphilis shall:

(a) Endeavor to bring an individual with whom the patient has had potentially infectious contact to examination and epidemiologic treatment by:

(i) Requesting the health officer to conduct a contact investigation of any case of syphilis; or

(ii) Interviewing the patient in order to ascertain the names, descriptions, addresses, and telephone numbers of those with whom the patient has had potentially infectious contact; and

(b) Report immediately to the health officer any untreated individual identified as having had potentially infectious contact with an individual having syphilis.

(2) A health officer shall:

(a) Investigate and notify immediately an individual reported under the provisions of §B(1)(b), of this regulation, who is within the health officer's jurisdiction, to submit to a medical examination to ascertain whether the individual is infected with syphilis. . . .

(3) A reported individual shall:

(a) Within 1 week of notification, be examined by a licensed physician to ascertain whether the individual has been infected with syphilis, and

(b) Be treated with a regimen appropriate for the stage of syphilis to which the individual has been exposed.

C. Infection Control. A health care provider shall practice drainage/secretions precautions until 24 hours after the start of effective therapy on cases of syphilis with potentially infectious lesions.

D. Congenital Syphilis

(1) A physician in attendance upon a pregnant woman shall:

(a) Serologically test her for syphilis in accordance with Health-General Article, §18-307, Annotated Code of Maryland;
(b) Render appropriate treatment within 1 week whenever syphilis, in any stage, is diagnosed; and
(c) Report the case to the health officer immediately.

(2) A physician in attendance upon an infant born to an untreated woman who has a positive serological test for syphilis shall:

(a) Evaluate the infant for possible congenital syphilis and render all indicated treatment; and
(b) Report immediately to the health officer the following information:

(i) The name, address, and telephone number of the mother,
(ii) The results of the serological testing, including titers, and
(iii) The results of the medical evaluation for congenital syphilis for the infant.

(3) A health officer shall:

(a) Investigate immediately an individual reported to the health officer under the provisions of §D(1)(c) and (2)(b) of this regulation, who is within the health officer's jurisdiction; and
(b) Forward immediately to the Secretary a report of an individual reported under the provisions of §D(1)(c) and (2)(b) of this regulation who is outside the health officer's jurisdiction for referral to the health officer of the proper jurisdiction.

.19 Other Sexually Transmitted Diseases.

C. Prevention of Gonococcal Ophthalmia Neonatorum.

(1) A birth-attending physician or certified nurse-midwife shall apply to both eyes of the newborn one of the following prophylactic agents:

(a) A 1-percent silver nitrate solution provided in individual wax ampules for the prevention of gonococcal ophthalmia neonatorum;
(b) Tetracycline ophthalmic ointment; or
(c) Erythromycin ophthalmic ointment (USP).

(2) A birth-attending physician or certified nurse-midwife shall document in the newborn's medical record the application of the prophylactic agent, the name of the agent used, and dose strength.

.20 Shigellosis.

A. Control of a Case.

(1) A case may not attend a child care facility until the case's fecal culture are Shigella-free on two consecutive specimens collected not less than 24 hours apart and not sooner than 48 hours following discontinuation of antibiotics, if antibiotics have been given, or until the health officer approves readmission based on the low likelihood of disease transmission.

(2) A case, with or without diarrhea, may not participate in occupations involving food handling, patient care, or care of young children or the elderly until the case's fecal cultures are Shigella-free on two consecutive specimens collected not less than 24 hours apart and not sooner than 48 hours following discontinuation of antibiotic, if antibiotics have been given, or until the health officer approves resumption of occupational duties based on the low likelihood of disease transmission.

.22 Tuberculosis.

A. Control of a Case.

(5) A health officer may require an individual having tuberculosis in a non-communicable stage to be under medical supervision if the individual refuses to receive adequate chemotherapy.

Copies of COMAR 10.06.01 containing the entire set of regulations should be available by the end of the year. Please call Mrs. Rice-Thomas at 410-225-6712.

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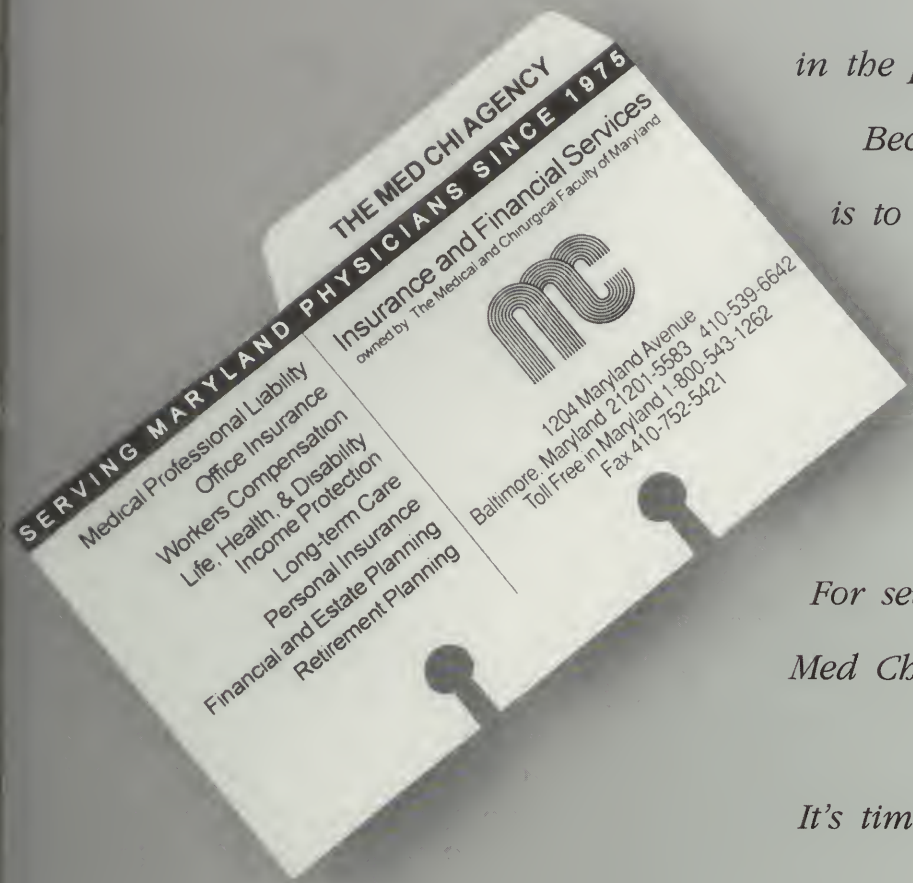
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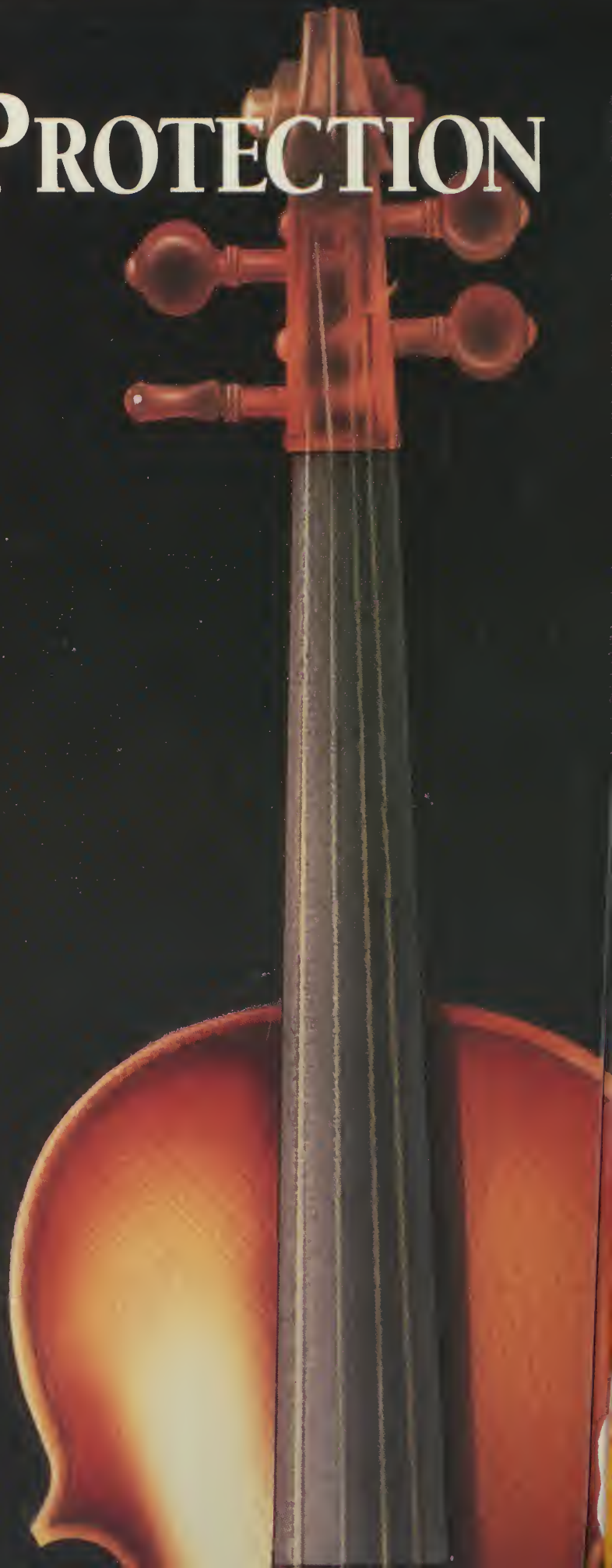


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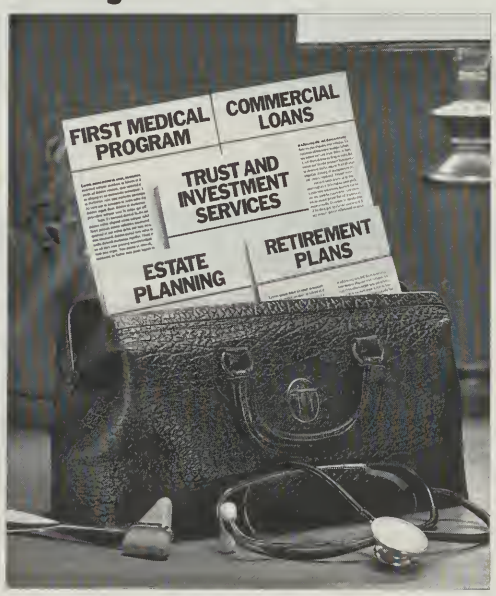
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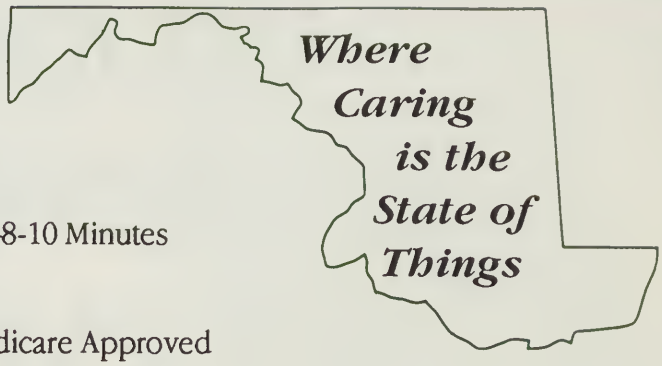
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Chief Executive Officer's Newsletter

December 1993

Rally in Annapolis for Handgun Control

Marylanders Against Handgun Abuse (MAHA) and the Standing Against the Gun Epidemic (STAGE) coalition are sponsoring a rally in Annapolis for handgun control on Monday, January 17, 1994, at 5:30 p.m. Transportation to Annapolis is being provided from Memorial Stadium at 33rd Street in Baltimore leaving at 3:30 p.m. For additional information, contact MAHA at 410-889-1477.

Statewide Substance Abuse Education Program Initiated

On October 1, 1993, Med Chi, with support from the Governor's Drug and Alcohol Abuse Commission, initiated a statewide substance abuse education program. The program focuses on screening, counseling, and referring substance-abusing patients. It will be offered to Maryland's primary care physicians as a continuing medical education course and in a self-study guide format. Courses are already being set up throughout the state. For more information about the program, or to schedule a presentation, please call Carmine M. Valente, Ph.D., at 410-539-0872 or 800-492-1056.

Study Group for Alternative Medicine

"Alternative Medicine in an Academic Hospital Setting" will be the topic of a talk by Brian Berman, M.D., at the second meeting of Med Chi's Study Group for Alternative Medicine. Dr. Berman is assistant professor of anesthesiology and family medicine at the University of Maryland Medical Center and director of the Laing-University of Maryland at Baltimore Complementary Medicine Project. The meeting will be held at Med Chi on January 19, 1994, at 7:00 p.m. Please call Steve Jones at Med Chi at 410-539-0872 or 800-492-1056 or Hiroshi Nakazawa, M.D., at 410-644-1502 if you wish to attend or receive additional information.

Fourteenth Annual Med Chi Photo Contest

Med Chi physicians and auxiliary members are encouraged to enter the 14th Annual Med Chi Photo Contest. First and second prizes will be awarded in both color and black-and-white categories. All photographs submitted for the contest will be displayed during the 1994 Med Chi Annual Meeting at the Ramada Inn and Convention Center in Hagerstown, Maryland. For complete contest rules, see the last page of this *Chief Executive Officer's Newsletter*.

Award for Excellence in Organized Medicine

In the coming months, Maryland medical school deans will be asked to nominate senior medical students who have made outstanding contributions to organized medicine. Physicians who know or work with medical students are encouraged to tell these students about this award. Medical students are urged to contact the dean of their medical school to express their interest. Students must be members of Med Chi and must be involved in organized medicine. The award consists of a handsome engraved plaque and will be presented during Med Chi's annual meeting.

1994 Med Chi Annual Meeting

Plan to attend the 1994 Med Chi Annual Meeting being held Thursday, May 12 through Saturday, May 14, 1994, at the Ramada Inn and Convention Center in Hagerstown, Maryland. The theme of the meeting is "Medicine Under Health System Reform—Impact on Patients and Physicians." Watch the *Chief Executive Officer's Newsletter* for more information.

Mark Your Calendars

House of Delegates, Council, and Executive Committee Meeting Dates for 1994

The dates for 1994 House of Delegates, Council, and Executive Committee meetings are listed below. Meeting times for the House of Delegates will be announced at a later date. Council and Executive Committee meetings begin at 4:00 p.m. in the Med Chi Faculty Building, 1211 Cathedral Street, Baltimore, except during the annual and semiannual meetings.

House of Delegates

May 13, 1994 (annual meeting)
May 14, 1994 (annual meeting)
September 9, 1994 (semiannual meeting)

Council

January 20, 1994
March 17, 1994
May 13, 1994 (annual meeting)
May 14, 1994 (annual meeting)
July 21, 1994
September 9, 1994 (semiannual meeting)
November 17, 1994

Executive Committee

February 17, 1994
April 21, 1994
June 16, 1994
August 18, 1994
October 20, 1994
December 15, 1994

AMA Letter to President Clinton Explains AMA Health System Reform Position

In a letter dated December 15, 1993, AMA president James S. Todd, M.D., outlined the common goals of, and the differences between, the Health Security Act and the AMA's proposal for health system reform. Common goals include universal coverage, community rating, portability, administrative simplicity, and choice. Areas of "significant disagreement" cited by the letter are excessive governmental regulation, the lack of protection of the physician's role in medical decision making, and the absence of meaningful liability reform. The letter also requests an opportunity to meet with the President before Congress reconvenes to "narrow the policy differences between the Administration and the AMA in advance of formal Congressional action."

Angelo J. Troisi, F.A.C.H.E.
Chief Executive Officer

HEALTH SYSTEM REFORM

MEMORANDUM

TO: All Members
FROM: George S. Malouf, Sr., M.D.
AMA Delegation Chairperson
DATE: December 1993
RE: Initial Report on the 1993 AMA Interim Meeting (I-93)

From December 5 through 8, 1993, the American Medical Association (AMA) held its interim meeting to review and discuss the AMA's policies on a variety of issues. During this meeting, over 86 reports and 130 resolutions were reviewed. One of the critical issues the House of Delegates discussed was health system reform.

Throughout the meeting, various issues surrounding health system reform were debated. However at the meeting's conclusion, the delegates overwhelmingly reaffirmed the medical profession's support for two major concepts addressing patient care: universal health insurance coverage and universal access to health care services. To achieve these goals, the AMA is recommending flexibility for financing health care and is supporting both employer-required and individually required and individually owned health insurance. The AMA believes that in order to achieve effective health system reform, all options for financing health coverage must be explored.

In addition, the AMA adopted a resolution that insists that health system reform plans: (1) are not biased toward managed care and include a true fee-for-service option, including balance billing; (2) allow physicians and patients choice of plans and physicians; (3) alleviate regulatory hassles and preserve high quality care; (4) provide meaningful antitrust relief, including the ability for state and county medical associations to form partnerships of physicians for the purpose of being "accountable health plans"; (5) provide true tort reform; (6) provide significant insurance market reforms; (7) recognize the physician's unconditional responsibility and authority in medical decision making and treatment; and (8) provide universal access free from rationing, and to include reasonable basic benefits, patient education, and significant patient responsibility for their own health care choices and behavior.

As a result of your delegates' diligent and careful work during the interim meeting, amendments proposed by the Maryland Delegation to various resolutions were adopted by the AMA. While the various health reform bills work their way through Congress, the AMA and the Medical and Chirurgical Faculty of Maryland will continue to work aggressively to ensure that reform provides our patients with the quality health care and health care security that they deserve. We ask for your continued support as we work with the Clinton administration and our representatives to shape the future of health care in America.

Enter the Fourteenth Annual Med Chi Photo Contest!

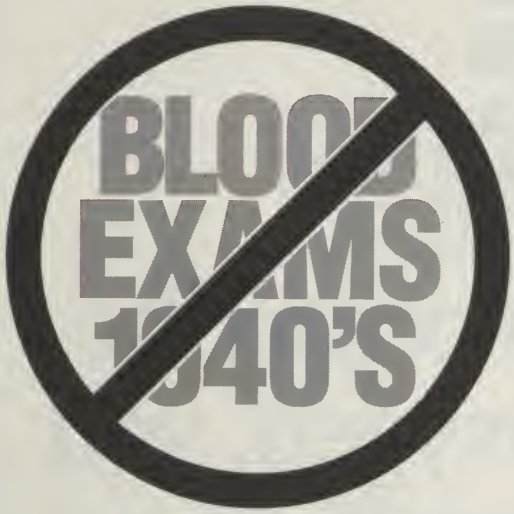
Deadline for entries is Friday, March 25, 1994.
Two categories: black & white OR color.
Open to all Med Chi and Auxiliary members.
First and second prizes awarded in each category.
All entries will be displayed at the 1994 annual meeting at the Ramada Convention Center, Hagerstown.



Photo Contest Rules:

Eligibility: All members of Med Chi and members of the Auxiliary may enter. Professional photographers may not enter. Members of the Photo Contest Committee and their families are not eligible.

1. Photographs may be submitted in two categories: black and white OR color
2. Limit: three entries per person.
3. Prints only; prints smaller than 8" x 10" or larger than 11" x 14" will not be accepted. If your favorite shot is a slide, you must have a print made within this size range to enter the contest.
4. Entries must be matted or dry mounted. No framed photographs will be accepted.
5. Entries must have name, address, and telephone number attached to the back of each photograph.
6. Entries may be mailed or brought to Med Chi, 1211 Cathedral Street, Baltimore, MD 21201 by 5:00 pm on March 25.
7. Photographs entered in the contest will be on display at the 1994 annual meeting.
8. Prizes will be awarded to the first and second place winners in each category..
9. Winners will be announced at the annual meeting of the Medical and Chirurgical Faculty, May 12-14, 1994.
10. Photographs will not be mailed back. They may be claimed at the exhibit area at the close of the annual meeting at noon on May 14 or at Med Chi thereafter.
11. Med Chi does not guarantee against loss or damage of any kind to the photographs submitted to the contest.



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Angelo J. Troisi, F.A.C.H.E.

Mr. Troisi is chief executive officer of the Medical and Chirurgical Faculty of Maryland.

After President Clinton announced his health system reform plan, it seemed that every headline addressed the same issue. But one headline in the *Evening Sun* editorial pages put it best, "Health reform has its own life." No where is this more evident than in the legislative arena. This is why we have worked so hard to put together a team to represent, in Annapolis, all the physicians of this state.

Although health system reform and, more specifically, HB 1359, the Health Care and Insurance Reform Bill, received a vast majority of the public's attention, many other issues were tackled by our legislative team in 1993. They worked diligently on issues of self-referral, physician rehabilitation and peer review, tort reform, and office x-rays, to name a few. During the 1994 session, some of these same issues will be raised again. I am confident that the people we have working for you, your practice, and your patients, will meet the challenges of the 1994 legislative session with the necessary mix of experience and enthusiasm.

Early in 1994, Med Chi will be installing an information hotline. Members will be able to access recorded information on topics such as the Clinton health care plan, Maryland's HB 1359, upcoming legislative dates of interest, and other legislative issues affecting the practice of medicine in Maryland.

Med Chi will continue to keep members informed of Maryland's legislative activities through *Legislative Action*, a newsletter published weekly during the session. The newsletter includes a synopsis of each bill, along with the Legislative Committee's action on each bill, and a calendar of upcoming hearings before House and Senate committees.

If you have specific questions or concerns about a legislative matter, please call our Annapolis office at 410-263-4035, or call our Baltimore office at 410-539-0872 or 800-492-1056. Please keep us apprised of your views by submitting letters to the editor, contacting Med Chi staff, and communicating with Med Chi leadership. ■

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Communicating with legislators

Joseph A. Schwartz III, Esq.

Mr. Schwartz is a lobbyist for the Medical and Chirurgical Faculty of Maryland.

The 1994 session of the Maryland General Assembly will convene on Wednesday, January 12, and remain in session for 90 consecutive calendar days until midnight on April 11. Some believe that 1994 will be anticlimactic with respect to health system reform given the debate in Washington, DC, on the Clinton health care package and given that Maryland presented its approach to health system reform with passage of House Bill (HB) 1359 last year. I believe, however, that there will be numerous health system reform proposals precisely because of the ongoing debate in Washington and because of implementation issues surrounding HB 1359.

All members of the Maryland Senate and the Maryland House of Delegates will be up for election in 1994. Historically, election year sessions do not bring many substantive enactments. They always bring a high number of proposals, however, as various individuals begin their campaigns for reelection. Typically, the second and third years of a four-year term are those in which substantive enactments are made.

Because health care has come front and center and will remain so for the near future, it is particularly important for Med Chi and its member physicians to be informed and prepared on the numerous issues. For this reason, Med Chi's Legislative Committee is divided into four substantive subcommittees: Boards and Commissions, Health Insurance, Public Health and Tort Reform, and Medical Practices. These divisions enable the Legislative Committee to provide the proper attention to all health-related legislation.

As a physician and Med Chi member, you may be called upon to testify before the Maryland General Assembly or write letters to your representatives. You should remember that there is absolutely no substitution for preparation in dealing with legislators. (If possible, provide materials supporting your position and examples that clearly demonstrate the impact of the legislation. Be sure to relate how the action you are requesting will benefit a legislator's constituency.)

However, even the best prepared people can lose their audience if they do not present their arguments in a clear, concise manner. The Maryland General Assembly will consider 3,000 items of legislation in 1994. Citizens

Profile of the 1993 Maryland General Assembly*

	Number	Percent
◆ House membership	**141**	
Male	105	74
Female	36	26
◆ Senate membership	**47**	
Male	37	79
Female	10	21
◆ Party affiliation		
Democrat	154	82
Senate	38	81
House	116	82
Republican	34	18
Senate	9	19
House	25	18
◆ Race		
White	155	82
African-American	31	17
Other	2	1
◆ Birthplace		
Maryland	97	52
Other states	87	46
Other countries	4	2
◆ Age		
< 30	1	1
30–39	19	10
40–49	47	25
50–59	70	37
≥60	48	25.5
Not reported	3	1.5
◆ Religion		
Catholic	71	38
Jewish	21	11
Protestant	79	42
Not reported	14	7.5
Other	3	1.5
◆ Education		
Advanced degree	90	48
College degree	52	28
Some college	33	17
High school	13	8

	Number	Percent
◆ Occupations		
Attorney	42	22.5
Legislator (full time)	40	21
Business professional	32	17
Educator	21	11
Manager	8	4
Insurance professional	7	4
Consultant	6	3
Public administrator	5	3
Social worker	3	1.5
Agriculturist	2	1
Banker	2	1
Pharmacist	2	1
Real estate professional	2	1
Other (one each)	16	9
auctioneer, aviator, cosmetologist, dentist, engineer, funeral director, ice skating instructor, labor leader, law enforcement professional, optometrist, physical therapist, physician, publisher, steamship clerk, veterinarian, writer/editor		
◆ Marital status		
Married	152	81
Single	36	19
◆ Children		
None	30	16
One to three	117	62
Four or more	41	22

**Information provided by the Department of Legislative Reference.*

Addressing correspondence

Delegate and representatives
The Honorable (full name)
(Complete address)

Dear Mr. (or Ms) (surname):

Senators
The Honorable (full name)
(Complete address)

Dear Senator (surname):

and interest groups will be tugging on legislators' sleeves every hour of the day. Therefore, it is critical that when you present testimony or write letters, you make your statements short, courteous, and to the point. (Limit your letters to one page and one issue.)

Finally, remember that no matter how well prepared you are or how persuasive your argument, legislators may just disagree. It is at this point that you must remain civil in spite of your disappointment, frustration, or anger. It is easy to be a gracious winner; not so easy to be a gracious loser. Civility, even in the face of defeat, may be the characteristic that wins you the next issue.

Preparation, brevity, and civility are the hallmarks of any attempt to communicate with legislators. The Maryland General Assembly is a diverse body (see box) but, as a rule, its members respect and listen to those who provide truthful, direct, and measured information on a consistent basis. ■

Advances and consolidation in the age of health system reform

Angus Everton, Esq.

Mr. Everton is general counsel for the Medical and Chirurgical Faculty of Maryland.

ABSTRACT: *The health care system reform process will require organized medicine to face hard choices in 1994. This article discusses the legislation enacted in Maryland during the last few years, how it may be affected by the Clinton plan, and what issues can be expected to be of concern during the 1994 legislative session. Resolving the differences of opinion and ensuring high quality patient care will require imagination, intelligence, patience, and goodwill on behalf of all parties involved.*

Reform of the nation's health care system will prevail among political issues in the 1990s. President Clinton made it the centerpiece of his election campaign, and now, after the introduction of his administration's landmark reform bill, it may define his presidency. Physicians can expect all aspects of medical practice to be subject to legislative scrutiny, and no significant part of the health care delivery system may remain untouched by the reform process. Barring an unanticipated, profound reversal in the trend of public thinking, the practice of medicine in America will never be the same for its practitioners or its patients.

For Marylanders, health system reform has already arrived. The process had its origins in the 1970s, first with the creation of the Health Services Cost Review Commission (HSCRC), designed to regulate costs and rates of hospitals and related institutions and, subsequently, with the establishment of the Health Resources Planning Commission, founded to control and allocate capital expenditures and resources among medical facilities. Neither of these institutions, however, has a direct, day-to-day influence over the practices of most Maryland physicians. The Health Care Access and Cost Commission (HCACC), created during the 1993 legislative session by House Bill (HB) 1359, will have such an influence; the Clinton plan, if it is enacted in anything like its present form, will have an even more profound effect over the way Maryland doctors practice medicine.

The first recent legislative act to set the stage for health system reform in Maryland was the 1992 enactment of a law establishing a uniform claims form for health insurance claims, based on the Health Care Financing Administration (HCFA) 1500 form. This uniform claims form, which was established by regulation effective October 1, 1993, is an essential component of the data collection process embodied in HB 1359; without a uniform system for claims transmission, medical care data collection would verge on the impossible.

In 1993, the Maryland General Assembly enacted three statutes—HB 1359 (now Chapter 9, Laws of Maryland 1993), HB 1280 (now Chapter 376, Laws of Maryland 1993), and HB 1243 (now Chapter 372, Laws of Maryland 1993)—each of which, without significantly interacting, has the potential to influence medical practice in far-reaching ways.

At this stage, the dark horse of health system reform is the Clinton plan. Introduced to the public by President Clinton on September 22, 1993, the plan would appear to preempt large portions of HB 1359 with a more comprehensive and rigorous federal regulatory scheme, and would replace Maryland's "Self Referral Bill" (HB 1280), altogether. One cannot predict, however, the final form, or even the ultimate passage, of the Clinton plan. In this respect, Maryland health system reform legislation is a "bird in the hand"; it is here, and, from all indications, many legislators believe it will remain here for the foreseeable future.

What follows is a description of Maryland's health system reform legislation and predictions regarding its regulatory and practical applications, as well as some discussion of legislative changes that may be expected in 1994 and thereafter. Finally, the Clinton plan in its permutation as of press time is discussed in terms of how its enactment would affect Maryland's health system reform scheme.

These legislative enactments have the potential to generate much that is good or much that is evil for our health care system delivery and for patients' welfare. It is essential that Med Chi members be leaders in interpreting and applying these laws over the ensuing months and years. At a minimum, every physician in Maryland should know the identity of his or her representatives. If possible, physicians should become personally acquainted with their legislators and keep them informed about what is right for patients and the health care system.

House Bill 1359

HB 1359 was first introduced strictly as a data collection and insurance reform bill. During the early part of the 1993 legislative session, the bill was reintroduced and amended to create a new subtitle in the insurance code that would establish community rating, guarantee issue of health benefit plans, eliminate pre-existing condition provisions, and establish portability of health plans. In this form, the bill was acceptable to the medical profession and consistent with the goals of the American Medical Association's (AMA's) Health Access America.

Changes in HB 1359. Work group meetings were held during late February and early March by the House Economic Matters Committee and Environmental Matters Committee. Without warning, in early March, the bill was completely restructured, amending the portions creating a universal health insurance package to apply only to small business group health insurance, restructuring the commission created under the bill, and establishing a mandatory fee schedule system to cap physicians' (and only physicians') fees. This latter amendment to the bill was introduced late in the afternoon of the last day the Economic Matters Committee considered the bill. The amendment was incorporated into the bill approximately 20 minutes later, without any opportunity for Med Chi or physician input.

Med Chi and specialty society groups mobilized strong opposition to HB 1359 in this form. The Senate Finance Committee held hearings on HB 1359 that were heavily attended by physician representatives. A well-attended physician rally was held in front of the State House; this generated substantial publicity on the essentially unfair and adverse nature of HB 1359 in its new form as applied to physicians. Thereafter, Med Chi was intimately involved in attempting to develop a consensus among groups that would be affected by this legislation. The final outcome was a health system reform bill that, although it does not apply universally to all health insurance in the state, lays the groundwork for eventual universal access. In its final form, HB 1359 is designed to apply to all health care professions regulated by the state.

As enacted, HB 1359 embodies four major areas of legislation: data collection, small insurance market reform, development of practice parameters, and development of a payment system. One provision establishes a system to evaluate the quality of care and performance provided by health maintenance organizations (HMOs). Another provision, inserted in the last moments of the legislative process, establishes controls on charges to payers for diagnostic testing (see box). The act "pays for itself" by funding the commission through charges against payers (two-thirds) and practitioners (one-third).

Medical care database. Section 19-1507 (a) of the act directs HCACC to "establish a Maryland medical care database to compile statewide data on health care services rendered by health care practitioners and office facilities selected by the commission." By July 1, 1995, data collection is to be undertaken through "licensed claims clearinghouses" that will serve as intermediaries between practitioners and payers. It is anticipated that HMO claims and data will ultimately be submitted electronically to the clearinghouses, which would extract the HCACC-required data and then pass the claims to the respective payers.

It is here that Maryland's standard claims form becomes an important factor; HCACC is required to collect data from all payers in categories essentially identical to those included on the standard claims form, such as patients' demographic characteristics; principal diagnosis; procedure performed; date and location where the procedure was performed; and charge for the procedure. The HCACC is also empowered to collect further information at its discretion, for example, to operate the law's payment system.

While one subsection of the bill requires physicians to collect data "for each type of patient encounter with a health care practitioner. . .," a subsequent provision implies that after July 1, 1995, the HCACC may no longer limit data collection to a representative sample for a health care service provided by a health care practitioner or office facility.

There is further ambiguity as to whether data collection will be limited to transactions to be reimbursed by "payers," defined as health insurers, third-party administrators, or self-insured groups. Since the payment system requires the HCACC to consider "the reasonable cost of bad debt and charity care" in establishing each practitioner's resource base, it is necessary that the HCACC collect some data on transactions not covered by health insurance. However, the only mechanism for data collection in the act—through the licensed claims clearinghouses—appears to be designed to collect data only from claims submitted to payers. Apparently, the HCACC will have to create a second system to process non-payer-reimbursed patient encounters, either through the clearinghouses or independent of them.

Once the database is operational, the data will be published, subject to restrictions on patient confidentiality. Data publication will allow consumers to use the database information to help make informed decisions in selecting their health care practitioners. The data will undoubtedly also be used to monitor utilization and will be essential to the operations of the payment system.

Insurance reform. Small group market reform is at the heart of the act. The driving force behind federal and state health system reform is the unavailability of health insurance to a considerable minority of our population. It is hoped the act will promote health insurance access among employees of small businesses, which are defined as employing between 2 and 50 employees. The act was confined to small businesses for two reasons. First, small businesses have the most difficulty obtaining employee health insurance at an affordable price; second, larger businesses are permitted to self-insure under the federal ERISA (Employee Retirement Income Security Act) law, and it was thought that these federally authorized self-insurance plans could not easily be brought under the regulatory jurisdiction of HCACC. The act does contain two trigger provisions, automatically extending its effect to the general health insurance market if (a) 60% of the population under 65 years of age would receive health care coverage through a small business insurer or HMO, or (b) if the federal ERISA is amended to allow states to control employee health benefit plans. It is unlikely that these events will occur, although the latter is more possible than the former.

The weakest aspect of this small business reform is that while insurers, in order to participate in the small business market, must offer the comprehensive standard health benefit plan to be developed under the act, small businesses are not obligated to purchase it. If, however, a small businesses does wish to purchase health insurance for its Maryland employees, it will be obligated to purchase a plan simply because no health insurer may offer less.

Under Section 4 of the act, which is an unmodified section, a Maryland Standard Benefit Plan Task Force was created to advise the HCACC on the initial development of the standard comprehensive health benefit plan. This task force was required, by December 1, 1993, to submit recommendations to the HCACC on the overall design of the standard comprehensive health benefit plan, including the specific scope and estimated cost of benefits. According to the act, the plan must offer, at a minimum, the benefits required under federally qualified HMO plans; however, the average community rate for the plan, as determined annually by the HCACC, may not exceed 12% of the average annual wage in Maryland.

The actuarial cost of plans equivalent to that offered by a federally qualified HMO, as determined by the actuary selected by the task force, is close to 12% of the average annual wage in Maryland, and as the HCACC has decided that each of the four types of plans to be offered (health maintenance organization plan, point-of-service plan, preferred provider organization plan and fee-for-service plan) should have identical premium rates, differences in the costs will be reflected in the plans' copayment and deductible provisions. The HMO plans are expected to have the lowest copayment and deductible provisions; the fee-for-service plan may have extremely high copayment and deductible provisions.

These actuarial projections are controversial and appear to favor HMOs; projections by other actuaries have tended to favor fee-for-service plans to a greater degree. A report issued in October 1993 by the federal General Accounting Office stated flatly that "[a]lthough many employers believe that they are saving money from network-based managed care, the evidence has been inconclusive about the extent to which such plans hold down employers' costs."

Over the years, the Maryland General Assembly has enacted many mandated health insurance benefits. Indeed, there are more mandated benefits under Maryland law than under the law of any other state. Because the Maryland General Assembly recognized that it might be difficult to offer an economical health benefit plan including all of the state's mandated benefits, it has provided that the HCACC may exclude any

mandated benefit in formulating the standard comprehensive health benefit plan. In somes instances, this has been the result, although much has been done to make the plan as comprehensive as possible.

Among the most significant provisions of small group market reform under HB 1359 are those that will, over time, eliminate preexisting condition exclusions and require the plans to be community rated. The community rating is not a full community rating—carriers may adjust the community rate for age, predetermined regional geography, and, as approved by the insurance commissioner, family composition. On or before October 1, 1998, the insurance commissioner is required to report to the governor and the Maryland General Assembly on the feasibility and desirability of establishing a pure community rate or of maintaining an adjusted community rate.

A carrier offering coverage under the act to a small business shall offer coverage to all of the employer's employees. There is no portability of benefits under the plan, but community rating and elimination of preexisting condition coverage will minimize problems associated with changes of employment. To sell health benefit plans to small Maryland businesses, an insurer shall file its proposed health benefit plans with the insurance commissioner on or before May 1, 1994.

An extensive section in the law creates a small business health reinsurance pool that provides optional reinsurance coverage to carriers offering the comprehensive standard health benefit plan. While participation in this pool is not mandatory, a carrier choosing not to participate in the pool must provide the insurance commissioner with "an appropriate opinion by an independent qualified actuary that the risk-assuming carrier is able to assume and manage the risk of enrolling small business groups without the protection of the pool."

A reinsuring insurance carrier's liability under the act may not exceed $10,000 in any one calendar year with respect to any reinsured individual, so reinsurance under the act cuts in at a relatively low level. While this may be of considerable benefit to less financially solvent health insurers, it could result in high reinsurance premiums, and stronger health insurers may be expected to avoid participation in the pool if they are able to do so under the act.

Practice parameters. The practice parameter section of HB 1359 had its genesis in a bill offered by the Maryland Society of Emergency Physicians. It was patterned after a Maine program under which practice parameters, if adopted by a majority of members in selected specialty groups, can be offered in evidence by the defense in a malpractice action, providing that proof of adherence to the practice parameters would constitute an absolute affirmative defense to liability in that action. It was believed (and accepted by a number of legislators) that establishment of broadly accepted practice parameters as affirmative defenses would minimize the incidence of defensive medicine by conferring immunity in this situation.

The emergency physicians' bill was incorporated into the Senate health system reform bill, Senate Bill (SB) 349, which was eventually to be folded into HB 1359. Unfortunately, because of intense lobbying pressure from the plaintiffs' trial bar, the bills affirmative defense provision was amended out leaving only a committee to establish practice parameters that could not be admitted into evidence for any reason in a medical malpractice action. Instead, the legislature incorporated a provision requiring that malpractice actions be proved by a "similar community" standard of care, rather than a national standard. The hope was to minimize use of hired gun experts from large medical academic centers out of state, as has become a common occurrence in malpractice litigation.

Removal of the affirmative defense provisions from the bill's practice parameter section largely eliminated the reason for practice parameter legislation. The parameters may be useful for utilization review in the future, however, and if the committee that is still empowered to create these parameters is successful in formulating them, the Maryland General Assembly may elect to revisit the affirmative defense issue and decide to reinstate the defense.

Payment system. HB 1359 includes a health care practitioner payment system modeled after the system recommended by the American Society of Internal Medicine. In some respects, it is patterned after the Medicare Resource-Based Relative Value Scale (RBRVS), with two critical exceptions. First, a resource base consisting of components specifically drafted by the Maryland legislature, not drawn from the federal act, will be assigned to each practitioner. Further, unlike Medicare, the practitioner and the payers may set the conversion modifier, which is the third element of the payment system, so that under ordinary circumstances in the fee-for-service context, the market will determine the cost of each medical service. The statute specifically provides that the conversion modifier may be set either by the payer, by the practitioner, or by an agreement between the payer or patient and the practitioner. Since no general provision in the act prohibits balance billing, if the payer's conversion modifier is less than the practitioner's, the practitioner may make up the difference by billing the patient, unless to do so is otherwise prohibited by law or regulation.

The act does, however, give the HCACC the power to set the conversion modifier for a specialty group if the data collected by the HCACC reflects that that specialty group's payments are not in line with the HCACC's annual health care cost adjustment goals. Prior to setting the conversion modifier, however, the HCACC is required, through "voluntary and cooperative arrangements with practitioners," to negotiate with the affected specialty group for the purpose of reconciling the specialty group's charges for a particular service with the annual goals. The HCACC would act to adjust the conversion modifier only if these voluntary efforts failed.

The "diagnostic test" section: A sheep in wolf's clothing

Physicians have been concerned about the section of the Maryland Health Care and Insurance Reform Act (HB 1359) governing laboratory fees [19-507 (h), p23-24]. This section establishes certain requirements if a physician's request for payment includes a charge to a patient for a diagnostic test for which payment may be made by a third-party payer. First, the request must indicate whether the test was performed by the physician or someone in the physician's office, or by another physician or office facility (e.g., laboratory). If the former, the bill must indicate who performed the test. If the latter, the bill must identify the physician or laboratory and include the amount charged to the physician who ordered the test.

The section also outlines payment procedures for diagnostic test services. If services are performed entirely in the physician's office, then the physician may bill the reasonable charge for the test less deductible and coinsurance amounts. If the test is performed in a laboratory, however, the physician may bill the lower of the laboratory's usual, customary, and reasonable (UCR) charge for the test or the amount the laboratory charged the physician plus a nominal fee to cover the physician's costs of collecting and handling the test sample, less deductible and coinsurance amounts.

Physicians cannot charge more than the amounts specified in the section; however, penalties for violation are not specified, nor is an enforcement method established. Additionally, a payer may refuse to pay a bill that does not comply with the section's provisions.

Although the section states that a laboratory's identity must be disclosed on the physician's bill, this requirement is not new. Since 1973, this requirement has existed in the disciplinary provision of the Practice of Medicine Act, now Section 14-404(a)(16), *Health Occupations Article*, Maryland Code.

Many laboratories find it impractical to bill patients or third-party payers directly. To save administrative costs, these laboratories offer substantial discounts to physicians who obtain the specimen, pay the laboratory for its services, and bill the patient or payer. This widespread practice usually saves the patient or payer money. Furthermore, physicians are legally and ethically constrained from padding these bills by Ethical Opinion 108.03.

Therefore, the only new part of Section 19-507(h) is the provision limiting the charge for diagnostic testing to the UCR fee the laboratory would charge the patient directly. Typically, this fee is greater than the amount resulting from combining the physician's charge with the laboratory's reduced charge. In these cases, the law poses no practical problem to the physician as long as the nominal fee charged for collecting and handling the specimen can be economically justified by the physician as covering his or her reasonable expenses in offering these services. If the laboratory does not discount its charges to the physician, however, legal and practical problems arise.

Legally, the section seems to delegate legislative or administrative rule-making power to nongovernmental entities—laboratories—in violation of numerous federal and state decisions prohibiting such delegation. Indeed, it is difficult to imagine any sound legal reason for allowing one set of professionals (laboratory managers) to manipulate the fees of another (physicians), by force of statute.

Practically, if laboratories stop discounting fees to physicians, the cost of collecting and handling specimens for patients may become prohibitive for physicians. Patients would then have to travel to laboratories for diagnostic test services. Some patients, because of illness, disability, or poverty, would not make the extra trip and would forego the laboratory work. Consequently, important tests might not be done, and critical diagnostic information might not be provided.

A further practical problem is that the section does not obligate a laboratory to disclose its UCR fees or be truthful if it chooses to disclose these fees. Therefore, physicians cannot actually determine whether the amount they bill for each service is lawful.

Overall, Section 19-507 (h) should create few problems as long as laboratories continue to substantially discount their charges to the physicians who send them specimens for testing and who agree to bill patients and payers for the laboratory services. Some physicians have expressed concern that this section of HB 1359 might bring the wolf to their and their patients' doors, but as long as laboratories do not change their current practices, Section 19-507 (h) will remain a sheep.

If laboratories do change their practices on a widespread basis, however, health care costs could increase, and the quality of health care could be diminished, transforming the sheep into the wolf.

ANGUS EVERTON, ESQ. ■

At HCACC meetings, it is clear the commissioners do not believe they possess the power to adjust an individual physician's fees. The power to adjust conversion modifiers applies only to specialty groups, in the sense of categories of practitioners, and not to individual practitioners. It appears implicit that this remedy would be applied only rarely.

Comparison of the payment system embodied in HB 1359 with that included in the Clinton plan is instructive. In its present form, the Clinton plan provides that under fee-for-service plans, regional health care alliances are required to set fee schedules for practitioners, and practitioners would be prohibited from balance billing, except to the extent of co-payment or deductible amounts. Unlike the resource-based system in HB 1359, it does not appear that the Clinton plan would make any allowance for differences in practice among affected practitioners, and those differences could not be adjusted through balance billing because of the prohibition. Manifestly, HB 1359 is vastly superior in this respect to the Clinton plan, offering market flexibility to the practitioner, while retaining the power to restrict runaway costs by adjustment of the conversion modifier in extraordinary circumstances.

House Bill 1280

The self-referral bill, HB 1280, first appeared in the 1992 session as HB 1374, where it had a checkered course, ultimately dying in the House Environmental Matters Committee. It finally passed in the 1993 session, largely because of relentless pushing from the Senate president, despite some legislators' wishes that self-referral legislation be submitted to summer study, and despite the substantial likelihood that this act will be preempted by federal legislation.

It is unfortunate that HB 1280 was enacted. In the unlikely event it survives federal preemption, it is almost certain to generate costly, time-consuming interpretive litigation before its scope and effect are fully established. It appears to have the potential to do a great deal of harm, without any clear evidence that it will do any significant good. While no one can seriously argue that practitioner self-referral is ethically inappropriate except under the most extraordinary circumstances, HB 1280 was not itself an appropriate response to the perceived problem.

The heart of the bill is Section 1-302 (a) of the *Health Occupations Article*, Maryland Code, which proclaims that except under certain circumstances, a health care practitioner may not refer a patient or direct an employee or contractor to refer a patient to a health care entity in which there is a beneficial interest or with which there is a compensation arrangement. It further provides that an entity or practitioner may not bill for a prohibited referral, and it provides for certain penalties, including disciplinary penalties, in cases of violation.

Referral definitions. The key to the bill is in its definitions as much as in its exceptions. Specifically, a "referral" is defined as any referral of a patient for health care services, including (1) forwarding a patient by one health care practitioner to another health care practitioner or to a health care entity outside the health care practitioner's office or group practice, or (2) the request or establishment by a health care practitioner of a plan of care for the provision of health care services outside the health care practitioner's office or group practice.

Referral exceptions. While this language is unnecessarily ambiguous, a reasonable interpretation is that referrals within the office or group practice are not referrals at all. The problem, however, arises among the exceptions; at least some of the exceptions appear to apply to group practice operations, even though by definition of "referral," they are excluded from the act altogether. Exceptions to the operation of the act are

- HMO referrals, if the health care practitioner does not have a beneficial interest in the entity (e.g., laboratory or pharmacy);
- another health care practitioner in the same group practice;
- a health care practitioner, with a beneficial interest in an entity, who refers a patient to that entity for tests that are personally performed by, or are under the direct supervision of, the referring health care practitioner;
- a health care practitioner who refers a patient for in-office ancillary services or tests (a particularly convoluted term, which for some reason excludes certain radiology equipment unless it is used in a radiologist's office) if the tests are personally furnished by the referring health care practitioner, a health care practitioner in the group practice, or an employee personally supervised by someone qualified in the group practice, and the test or service is provided in the same building where the referring practitioner furnishes services;
- a health care practitioner with a beneficial interest in an entity if the Department of Health and Mental Hygiene (DHMH) determines that the health care practitioner's interest is essential to finance the entity and the entity is needed to ensure access to the particular care it provides in the community;
- a health care practitioner, employed or under contract with a hospital, who refers a patient to an entity owned by the hospital if the health care practitioner has no beneficial interest in the hospital;
- a health care practitioner who has a beneficial interest in a health care entity owned or controlled by a hospital under the same circumstances; and
- a health care practitioner with certain beneficial interests or compensation arrangements in a hospital or related institution as of January 1, 1993, provided that

the interest or arrangement has not thereafter increased.

As discussed above, the 1993 Budget Reconciliation Act prohibits self-referrals under the Medicare laws. The federal provision is more straight forward than HB 1280, but applies only to Medicare arrangements. The Clinton plan, however, also contains self referral prohibitions, and these elements will probably be enacted. Parenthetically, the American Medical Association (AMA) has come out in favor of a federal anti-self-referral law, so it is reasonable to expect a federal law that will preempt HB 1280.

By its terms, the prohibitive provisions of HB 1280 do not apply to arrangements in effect as of January 1, 1993, until January 1, 1997. Prior to the latter date, however, a self-referral covered under this grandfather clause must be expressly disclosed to the patient.

House Bill 1243

The third major piece of legislation to emerge from the Maryland General Assembly in the 1993 session was the Health Care Decision Act, HB 1243. This act represents the culmination of formal efforts to create a coherent, universal policy to deal with problems presented by patients in a terminal condition, a persistent vegetative state, or an end-stage condition and maintained on life support, where it could be determined that the patients, if competent, would seek for cessation of life support.

Presenting advance medical directives. The new law contemplates four ways for presentation of advance medical directives and surrogate decision making. First, the law replaces the existing "living will" with more extensive living will provisions, and an alternate "advance directive," which is similar to a living will but broader and more flexible. Second, the law essentially codifies an existing practice of creating medical powers of attorney under a "health care agency" provision. Again, the health care agent's powers are broader under this law than those heretofore exercisable under a medical power of attorney.

Third, the law sets forth classes of individuals who may make surrogate health care decisions for an incompetent person in the event there exists no advance directive, living will, or designated health care agent. Finally, in the absence of the foregoing, a provision that empowers the guardian of a person, lawfully designated by the court, to make health care decisions on behalf of the incompetent person. The act also contains directions for emergency personnel if "do not resuscitate" orders exist. Another section grants broad immunity from liability to health care practitioners and decision makers who take action under the law.

Health care decision making. A competent adult may express his or her wishes about future health care by one or more of the following methods: (a) written instructions authorizing the provision, the withholding, or the withdrawal of health care; (b) written appointment of an agent to make health care decisions for the patient; or (c) an oral statement to a physician leaving instructions or appointing a health care agent. A written advance directive must be witnessed by two people; neither may be the person's health care agent, and at least one of the witnesses must not have a financial interest in the person's death. An oral advance directive must be made to a physician and witnessed by one individual, and must be recorded in the patient's medical record and be signed and dated by the physician and the witness.

Surrogate health care agents. A health care agent may not be an employee, owner, or operator of a health care facility where the patient is being treated, unless the agent would qualify as a surrogate. Surrogates—who may serve as such if a patient has not picked a health care agent, has not made an advance directive, and is no longer able to make health care decisions personally— include persons from the following classes, in descending order of priority:

- a guardian, if one has been appointed;
- the patient's spouse;
- an adult child of the patient;
- a parent of the patient;
- an adult brother or sister of the patient; or
- a friend or relative who specifies in writing that he or she is a close friend of the patient and provides facts to demonstrate enough regular contact with the patient so as to make the surrogate familiar with the patient's activities, health, and personal beliefs.

If there is a dispute among surrogates of the same class as to the care of a person who is no longer able to make health care decisions personally, the dispute must be referred to an institution's patient care advisory committee, or if the treatment is outside an institution, to a court.

Advance directives. Unlike the existing living will law, which permits withholding of life support except for artificial alimentation and hydration and only when the patient is in a terminal condition, an advance directive may now specify that life support may be withheld if the patient is in a terminal condition, is in a persistent vegetative state as defined in the law, or is in an end-stage condition, which is defined to mean "an advanced, progressive, irreversible condition caused by injury, disease, or illness, that has caused severe and permanent deterioration indicated by incompetency and complete physical dependency and, for which to a reasonable degree of medical certainty, treatment of the irreversible condition would be medically ineffective." The act also authorizes withholding of life support under these circumstances to include artificial alimentation and hydration, if so specified in the advance medical directive.

A surrogate, including a guardian, is empowered under the act to withhold life support treatments to the same extent as under an advance directive, following a complex analysis of what is in the patient's best interest. Again, however, in the case of surrogates and guardians, this may be done only if the patient is in a terminal condition, a persistent vegetative state, or an end-stage condition.

The case of health care agency, however, is otherwise: a health care agent may withhold life-sustaining treatment even if the patient is not in a terminal condition, a persistent vegetative state, or an end-stage condition, provided that the agent's decision is based on the wishes of the patient, or, if these wishes are unknown, on the patient's best interests, as specifically defined in the law. The only check on the agent's power to terminate life support in this situation is the patient's physician, who is authorized to refer the matter to the institution's patient care advisory committee or to a court having jurisdiction in the event that the physician thinks that the agent's instructions to terminate treatment violate accepted standards of medical care. There may well be circumstances under this law when the physician is indeed the patient's last line of defense, in the unlikely but entirely possible event that the agent makes a decision to terminate a temporarily incompetent patient's care from motives other than the patient's best interest.

Considering the protracted and complex negotiations that went into the passage of this act, it is unlikely that HB 1243 will be substantively amended this year.

Projected 1994 legislative interests

HB 1359 amendments. The Health Care Access and Cost Commission (HCACC) has publicly declared that it does not wish to see substantive changes to HB 1359 during this legislative session. The House Economic Matters Committee, through its chairperson, Casper R. Taylor, has expressed the same sentiment, suggesting that the HCACC should be given an opportunity to make the act work on its present terms. The HCACC has, however, compiled a fairly extensive list of relatively technical amendments to HB 1359, among which are some Med Chi–recommended amendments.

The HCACC has indicated to Med Chi, as an exception to its "no substantive amendment" rule, that it will not object to legislation removing the diagnostic testing provisions embodied in the first Section 19-1509 (h). At an HCACC open meeting held on the Johns Hopkins University campus on September 15, 1993, there was general agreement that the diagnostic test provision does not fit into the act's general scheme and is contrary to the payment system embodied elsewhere in the act.

The HCACC has also expressed concern with the "unbundling" definition embodied in the law's provisions dealing with the payment system. The HCACC would rather establish its own definition of unbundling, and staff have suggested that an amendment to this effect could be included in the corrective legislation that the HCACC intends to submit. Med Chi would support this technical amendment to the act also.

"Any willing provider" legislation. On December 1, 1993, Med Chi's Legislative Committee voted unanimously to endorse legislation that would require HMOs and other health insurers to allow any qualified physician to participate in their plans provided the physician was willing to accept the remuneration and other reasonable terms offered in the plans' contracts. Med Chi will seek enactment of such legislation during the 1994 session of the Maryland General Assembly.

Restoring the cap on noneconomic wrongful death damages. During the 1993 session, the Maryland Court of Appeals, in the case of *United States of America v Streidel,* astonished the Maryland legal and medical communities by eliminating the legislatively imposed cap on noneconomic damages in wrongful death actions. Amazingly, the court decided this issue on its own; even the plaintiff in the *Streidel* case had not requested a ruling that the cap did not apply to these actions.

The decision has the potential to wreak havoc on Maryland's medical malpractice insurers and to result, over time, in premium increases translating into thousands of dollars per physician per year. This single decision could be a substantial factor in raising health care costs over the intermediate future, unless the Maryland General Assembly reimposes the cap in these actions. This is so because approximately 20% of all medical malpractice actions are wrongful death actions, and, uncapped, the awards can be very substantial indeed. Several months after the court's opinion was handed down, a Baltimore County jury awarded approximately $7 million in noneconomic damages in a wrongful death malpractice action. There have also been other recent cases in which jury verdicts substantially exceeded $350 thousand predicated on noneconomic loss in wrongful death claims.

Malpractice insurance groups are expected to seek legislation reimposing the cap. Unfortunately, the *Streidel* decision probably cannot be retroactively nullified, so it is urgent that legislation be enacted to rectify this problem in the 1994 session. This will be one of Med Chi's highest priority items during this legislative session.

Health Resources Planning Commission. In September 1993, the Health Resources Planning Commission (HRPC) set up a consensus development group, consisting of physician, hospital, and insurer representatives, to explore whether gastrointestinal endoscopy should be included among those procedures requiring an HRPC certificate of need before being performed in an outpatient ambulatory facility or office setting. A primary question in the case of gastrointestinal endoscopy was whether such a procedure constituted "surgery," for the purpose of evaluating whether it was covered under the statute governing certificates of need, Title 19, Subtitle 1, *Health*

General Article, Maryland Code. More generally, however, HRPC staff have begun a broader inquiry to determine whether the current process of determining which specialties are exempt from the certificate of need requirement—by virtue of a list set up in 1986—is appropriate, or whether such decisions should be based on more rational criteria.

The inquiry was triggered by a hospital demand that all endoscopy be subject to certificate of need requirements. This demand was motivated by a perception that if endoscopy could be performed at a high quality level in an outpatient setting for much less cost than hospital-based endoscopy, hospitals would lose a great deal of money. If the exodus of other types of ambulatory surgery from the hospital setting to safe, inexpensive physician offices became universal, hospitals could lose a great deal of revenue. Indeed, it is reasonably well established that many surgical procedures may be done as safely in an office setting as in a hospital setting, and at substantially less expense.

The potential for a HRPC decision to deregulate in this area is predicated on an exception to the comprehensive health planning law, which excludes from the definition of a "health care facility," "the office of one or more private physicians, podiatrists, or dentists, regardless of whether such office is eligible or receives reimbursement from third-party payers as an ambulatory surgical facility or center, if that office provides services only within a single medical or surgical subspecialty as determined by the Health Resources Planning Commission in regulation, if the office is used only for the physician's patients or patients of the group, and if the office includes not more than four surgical suites." The law further states that for the purpose of the foregoing quoted paragraph, ophthalmology is a single subspecialty and, thus, excluded from the act.

Hospitals, through the Maryland Hospital Association (MHA), are exploring a legislative solution to this financial problem. One possibility is to bring all or most offices within the regulatory control of the HRPC or the Health Services Cost Review Commission (HSCRC). This would drive many offices out of business or cause them to charge rates equivalent to those charged at hospital facilities. Another choice would be to deregulate hospital outpatient ambulatory surgical facilities altogether, so as to level the playing field with the independent office practices.

Needless to say, introduction of legislation requiring universal regulation by the MHA would constitute a declaration of hostilities against the medical profession. Any legislation that needlessly imposes additional regulatory expense on the public would be counterproductive to the purpose of health system reform, as it would seem to be calculated deliberately to impose higher costs on the delivery of high quality health care services.

HMOs and emergency services. During the 1993 legislative session, a number of bills were introduced to address the tension between certain HMOs and certain health care practitioners who are not signed up with the HMOs but who are required to render medical care to the HMOs' subscribers, primarily through emergency rooms. Less scrupulous HMOs have made a practice of paying noncontracting practitioners at absurdly low rates, and collection of the difference from patients has been complicated by questionable interpretations of the anti-balance billing provisions contained in Section 19-710 (o), *Health General Article*, Maryland Code. The new legislation was designed to require HMOs to pay noncontracting practitioners at the rate billed by each practitioner, or at a reasonable market rate.

Most of this legislation was defeated, although two important bills did get through. HB 462, now enacted as Chapter 304, Laws of Maryland 1993, requires HMOs to pay noncontracting practitioners at the rate billed or at the usual, customary, and reasonable rate, and prohibits HMOs from relying on Medicare fee schedules, workers' compensation fee schedules, or, except in the case of medical assistance patients, Medicaid fee schedules. It further places the affirmative obligation on the HMO to disclose the methodology that it uses to determine the usual, customary, and reasonable rate.

Even more important was SB 701, now Chapter 635 of the Laws of Maryland, 1993. SB 701 was designed to terminate the practice of many HMOs of refusing to cover enrollees who went to the emergency room in the belief that their condition was an emergency, when it later turned out not to be an emergency. This act solves this problem by defining an emergency from the perspective of a reasonable layperson, rather than from a health care practitioner's perspective.

It will be Med Chi's task to protect the gains made for physicians and patients in the event that legislation is introduced to undo them, and to continue to seek to rectify the overall situation by appropriate legislation.

Smoking legislation. Med Chi expects to actively support legislation restricting minors' access to tobacco products and smoking in public places during the 1994 session. At its semiannual meeting in September, the Med Chi House of Delegates passed a resolution to support legislation prohibiting smoking in public areas. Further, Med Chi's general counsel was designated in June 1993 to serve as the chairperson of the Legislative Committee of the Coalition for a Smoke-Free Maryland; that committee has worked during the summer and fall developing legislation that will be offered in the 1994 session. The coalition has focused on the following four areas of legislation.

Restrictions on vending machine placement. The coalition has drafted a bill that would restrict minors' access to vending machines. The importance of this legislation was heightened in September 1993 when the Maryland Court of Appeals came down with a decision, in the case of *Allied Vending Company v Bowie,* holding that localities are precluded from passing local ordinances restricting vending machine location.

Minors' access to tobacco products. The coalition has also drafted a bill that will beef up the penalties and enforcement mechanism to prevent the sale of tobacco products to minors, and will also apply similar civil penalties to minors who use false identification to purchase tobacco products. A key facet of this bill is that if a vendor repeatedly violates its provisions within a three-year period, the vendor's cigarette license is subject to revocation.

Smoking in public places. In conjunction with the House of Delegates resolution governing this legislation, the coalition will work for legislation to prohibit smoking in public areas and facilities throughout the state.

Tobacco tax. The coalition has not prepared a tobacco tax bill for sponsorship, but will no doubt recommend supporting the tobacco tax legislation that is expected to be filed at the request of other groups in the state.

The Clinton plan

A draft of the Clinton plan was leaked to the public on the weekend of September 10, 1993. President Clinton described the plan to the public approximately 12 days later in a nationwide television address. Subsequently, the plan has emerged as proposed legislation. Anything said at this juncture about federal health system reform, however, is subject to a very important caveat—whatever emerges from negotiations between the administration and Congress may be enormously different from the plan in its present form. Nevertheless, the present plan's outline gives clear indication of the administration's thinking on health system reform, and a comparison of the Clinton plan with HB 1359 is certainly useful.

The Clinton plan's thrust is to provide health insurance for everyone in the United States, except undocumented aliens, by means of purchase through regional alliances. The concept is that small businesses are in an unequal bargaining position with large industry when it comes to purchasing group health insurance, and it is believed that the alliances, which will purchase several types of health care plans from competing insurers, including one fee-for-service plan, will provide the bargaining leverage that gets the best possible policy at the lowest possible price. The Clinton plan provides for a comprehensive standard health benefit policy, too, and the broad outlines of mandated benefits under this plan include pediatric vision and dental care, and somewhat more expanded mental health benefits—all of which go along with relatively low deductibles and copayments.

One great difference between HB 1359 and the Clinton plan is that the Clinton plan will require all Americans to join the plan; each person will be issued a "health security card," either when the citizen enrolls in the plan or when he or she first obtains medical care after the plan goes into effect.

The first question that arises is: How is this to be paid for? The administration's answer is that along with the tobacco tax, savings will be accomplished through elimination of fraud and waste, and everyone, even the unemployed, are expected to contribute something in premium payments, which in practical terms will actually constitute a universal health care tax. There is some concern that the administration has overestimated the money that can be saved by paperwork reduction, an end to systemic abuses, and elimination of some health care industry jobs.

The administration has pledged a rigorous paperwork reduction scheme centered on a universal health insurance form similar to the HCFA 1500 form, but at the same time, the plan calls for the creation of 100 to 200 new bureaucracies (the alliances), along with a National Health Board, and expanded supervisory and regulatory duties for the United States Department of Labor. Never in history has the creation of new bureaucratic structures been associated with a paperwork reduction; the opposite is the universal rule. It is claimed in the plan that the National Health Board and the Department of Labor will closely monitor quality, and this kind of peer review will require reams of paperwork in itself. If there is a universal health insurance premium, as described, the nation will have to keep close track of its citizenry to be sure that everyone pays. Overall, there will probably be a net increase in paperwork engendered by this plan.

Under the plan, employers will pay at least 80% of their employees' health insurance premiums, but labor organizations may negotiate payment by the employers of up to 100%. There will be subsidies for small businesses and the poor, which will have to be made up from other payments within the system. For the average American who now has health insurance, his or her premiums will rise markedly under the present Clinton plan.

The administration has made much of the fact that the plan will control health insurers' income. Probably, however, the plan will be financed largely by heavy reliance on HMO arrangements under which physicians are paid on a capitated basis, and rigorous fee schedules that will be imposed on fee-for-services practitioners, combined with a balance billing prohibition. In reference to fee-for-service transactions, there does not appear to be any provision for an RBRVS-type payment system under which individual practitioners' resource bases would be taken into account—the plan simply calls for a "fee schedule" and that is it. Of course, as with every aspect of the Clinton plan at this stage, provisions will be thoroughly reviewed in Congress and, through the process of negotiation, are subject to change.

With one notable exception, the plan makes only a few half-hearted stabs at medical malpractice tort reform. The one exception is adoption of a "collateral source rule" to reduce double payments. Otherwise, the plan relies on mandatory

health claims arbitration, certificates of merit, limitation of contingent fees to 33.33%, periodic payment of awards, and an "enterprise liability demonstration project."

Historically, none of these measures have resulted in substantial reduction in the direct cost of the malpractice liability system or the accompanying expenses associated with defensive medicine. Indeed, the "enterprise liability" option will probably work to increase, rather than decrease, the number and amount of malpractice verdicts, since by restricting liability to the practitioners' employers, such a rule would eliminate any compunction juries might have against imposing liability on practitioners personally.

The Clinton plan also contains a provision for "antitrust reform," permitting some limited protection for physicians who negotiate with health plans and form their own plans, and more extensive protection in cases of hospital mergers, hospital joint ventures and purchasing arrangements, and "physician network joint ventures." The plan does give assurance that practitioners who must negotiate their fee schedule with regional alliances under the fee-for-service plans will have some protection from antitrust liability for engaging in the negotiation process.

In the existing plan, nothing explicitly allows waivers for states that have their own health system reform plan, such as Maryland's HB 1359. Thus, the Clinton plan, if enacted in its present form, would supersede or preempt large portions of the Maryland plan. The small group market reform and the payment system contained in HB 1359 would be replaced with the more comprehensive and rigorous federal provisions; Maryland's database, on the other hand, would probably be incorporated directly into the federal system. The practice parameter section of HB 1359 would dovetail neatly into the federal affirmative defense tort reform provision—assuming that provision survives intact in the plan. The annual cost containment goals to be established under HB 1359 would undoubtedly be replaced by the federal global budget provisions.

Conclusion

The health system reform process will continue to require organized medicine to face hard choices—for example, there will be a constant, and sometimes irreconcilable, tension between the desirable goals of universal access to quality health care and mandatory benefits such as comprehensive mental health care and the need for freedom of patient choice of practitioners, for flexibility of health care delivery systems, and for reasonable, traditional means of compensation to ensure that the best care is available to the public from the best trained and most qualified practitioners. Resolving these fundamental tensions will require imagination, intelligence, great patience, and goodwill on the part of all the partners—patients, practitioners, payers, employers, organized labor, and politicians—in our American health care community. ■



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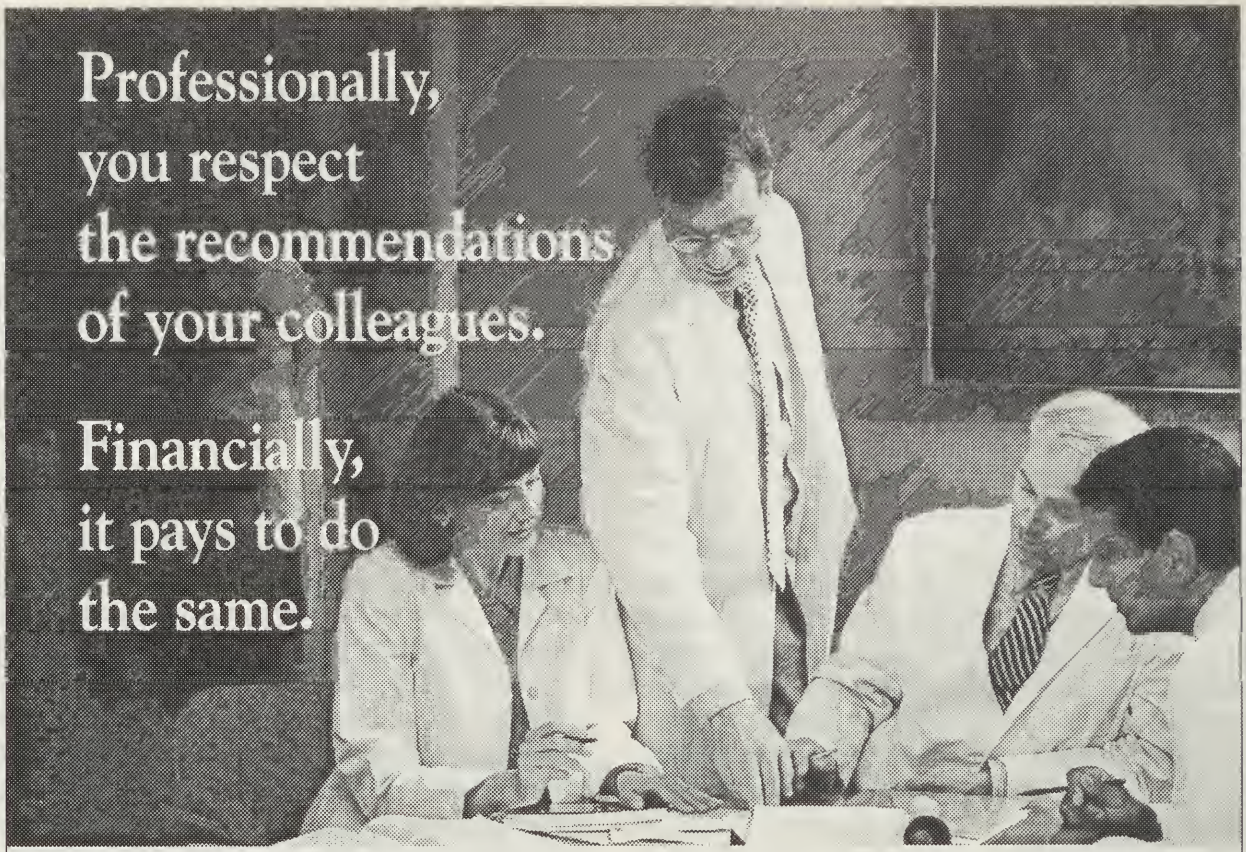
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The legislative process*

FROM HOPPER TO ENACTMENT

The drafting of legislation requires the skill of experienced and trained personnel. This service is rendered by the Department of Legislative Reference. A bill or joint resolution may be introduced in advance of regular sessions and is styled a "prefiled bill." A bill is filed (is dropped into the hopper) with the secretary of the Senate or the clerk of the House, is given a number, and is readied for its first reading on the floor. Bills may be introduced in either chamber until the last 35 days of the session. After that, bills may be introduced only with the consent of two-thirds of the membership.

First reading. The reading clerk, when the session has convened, reads the title, and the presiding officer assigns the bill to the appropriate committee.

Reference to committee. The committees meet daily during the session to receive testimony and take action on bills assigned. Citizens are encouraged to present their views on the subject matter by mail or by personal appearance. Legislative agents (lobbyists), representing organized interest groups, speak at these hearings, either to oppose or support the proposed legislation. The Department of Fiscal Services prepares a fiscal analysis for each bill, and these fiscal notes are considered during the committee deliberation.

Unfavorable committee action, which may mean legislative death, frequently requires as much, or more, committee discussion and time as favorable committee action, which sends the bill to the floor for a second reading and floor consideration.

Second reading and floor consideration. The bill is reported to the floor by the committee (favorably, unfavorably, or without recommendation, and with or without committee amendment). The bill is open to amendment from the floor, and the ultimate form of the bill must be determined on second reading. Committee action may be reversed, but this is infrequent.

Third reading. The bill must be printed for third reading with all amendments included in this final version. No amendments may be presented on third reading in the chamber of its origin, and the bill must be passed by a majority of the elected membership.

Second chamber. The procedure follows a pattern identical with that of the chamber in which the bill originated, except amendments may be proposed during third reading as well as second reading. If not amended in the second chamber, final passage may occur without reprinting.

* *Information provided by the Maryland Department of Legislative Reference.*

Consideration of bills*

CONSIDERATION OF BILLS ORIGINATING IN ONE CHAMBER AND AMENDED IN SECOND CHAMBER

If amended in the second chamber, the bill is returned to the chamber of origin, where a vote is taken on a motion to concur with or reject the amendments. If concurrence is voted, the bill itself is voted on as amended and action is complete. The bill is reprinted, or enrolled, to include the added amendments, before submitting it to the governor.

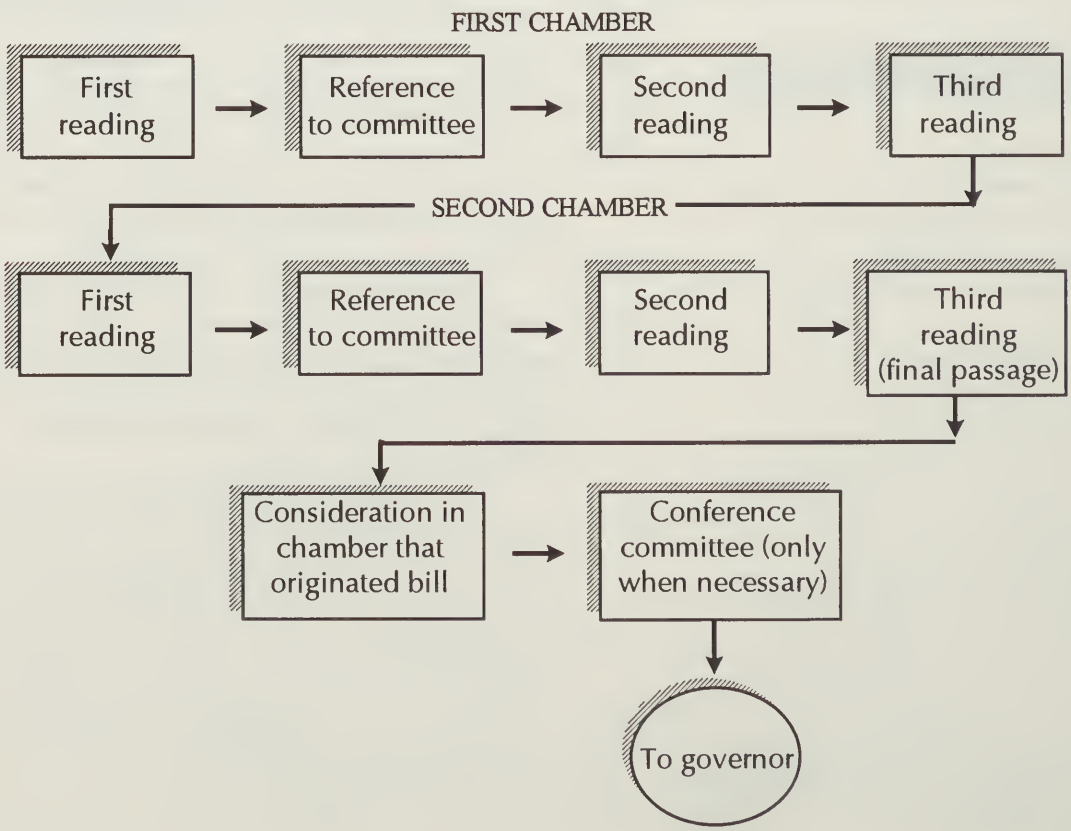
If the amendments are rejected, two courses of action are possible: (1) the amending chamber may be requested to withdraw its amendments, or (2) upon refusal of withdrawal of amendments, either chamber may request a conference committee to resolve the differences between the two chambers.

Conference committee. A report of a conference committee goes back to both chambers to be adopted or rejected without amendment. If the conference committee report is adopted, the bill is voted upon for final passage in each house. If the conference committee report is rejected by either house, the bill fails.

Presentation of bills to the governor. Presentation of all bills to the governor is mandatory, except for the budget bill and constitutional amendments. The budget bill becomes law upon its final passage and cannot be vetoed. Bills must be presented to the governor within 20 days following adjournment of a session, and in the case of such bills, the governor may veto them within 30 days after presentation to him or her. If a bill is not vetoed, it becomes a law. The governor may not veto a constitutional amendment.

The power to override a veto. This power rests with the legislature. If a bill is vetoed during regular session, the veto message is considered immediately. If a bill presented after the session is vetoed, the veto message must be considered at the next regular or special session of the legislature, except that the legislature may not override a veto during the first year of a new term. A three-fifths vote of the elected membership in each chamber is necessary to override a veto.

The progress of a bill*



** Information provided by the Maryland Department of Legislative Reference*

Important legislative dates

January 12 ..... General assembly convenes (noon, Wednesday).

January 13 ..... Governor delivers State of the State address.

January 19 ..... Final date for governor to introduce budget bill.

January 21 ..... Final date for submission of executive orders reorganizing the executive branch of state government. (Either chamber may disapprove by resolution within 50 days. Administration bills introduced after this date are referred to the Senate Rules Committee.)

January 25 ..... Senate bill and House bill request guarantee date. (All bills filed by this date *must* be considered by committee.)

January 26 ..... Final date for introduction of Governor's Salary Commission, General Assembly Compensation Commission, and Judicial Compensation Commission recommendations.

January 31 ..... Final date for governor to introduce capital budget bill. (Final date for submission of evaluation committee reports of governmental activities or units designated for program evaluation.

February 4 ..... Senate and House bill introduction date. (Senate bills introduced after this date are referred to the Senate Rules Committee.) House bill introduction courtesy date.

February 25 ..... House bills introduced after this date are referred to the House Rules Committee. (They are not guaranteed public committee hearings.)

March 7 ..... Final date for introduction of bills without suspension of rules.

March 22 ..... Committee reporting courtesy date. (Each chamber's committees should report out its own bills by this date.)

March 28 ..... Opposite chamber bill crossover date. (Each chamber should send to the other chamber those bills it intends to pass favorably. Opposite chamber bills received after this date are subject to referral to the rules committee.)

April 4 ..... Budget bill to be passed by both chambers by this date.

April 11 ..... Adjournment.

May 11 ..... Final date for an extended session.

Post-session

May 1 ..... Final date for presentment of bills to the governor.

May 31 ..... Governor to sign/veto bills by this date.

June 1 ..... Other than emergency bills, earliest date for bills to take effect. Governor to sign/veto bills by this date.

July 1 ..... Budget, tax, and revenue bills to take effect.

October 1 ..... Usual effective date for bills.

Important telephone numbers

- Legislative information and library ..... ext. 3810
- Information desk, State House ..... ext. 3886
- President of Senate ..... ext. 3700
  Thomas V. 'Mike' Miller, Jr.
- Senate majority leader ..... ext. 3697
  Clarence W. Blount
- Senate minority leader .... ext. 3568
  John A. Cade
- Senate Budget and Taxation Committee ..... ext. 3690
- Senate Economic and Environmental Affairs Committee ..... ext. 3661
- Senate Finance Committee ..... ext. 3677
- Senate Judicial Proceedings Committee ..... ext. 3623
- Speaker of the House of Delegates ..... ext. 3800
  To Be Announced
- House majority leader ..... ext. 3464
  R. Bruce Poole
- House minority leader ..... ext. 3401
  Ellen R. Sauerbrey
- House Committee on Appropriations ..... ext. 3407
- House Committee on Economic Matters ..... ext. 3519
- House Committee on Environmental Matters ... ext. 3534
- House Judiciary Committee ..... ext. 3488
- House Committee on Ways and Means ..... ext. 3469
- Bill room (copies of bills, amendments, and fiscal notes) ... ext. 3840

Senate standing committees

Budget and Taxation Committee

Room 100, Senate Office Building
Annapolis, MD 21401-1991
Telephone ext.—3690

- **Chairperson**
  Laurence Levitan, Montgomery County (15)
- **Vice chairperson**
  Barbara A. Hoffman, Baltimore City (42)
- **Members**
  William H. Amoss, Cecil and Howard counties (35)
  John A. Cade, Anne Arundel County (33)
  Leo E. Green, Prince George's County (23)
  Nathan C. Irby, Jr., Baltimore City (45)
  Julian L. Lapides, Baltimore City (44)
  Donald F. Munson, Allegany and Washington counties (2)
  Janice A. Piccinini, Baltimore County (10)
  Ida G. Ruben, Montgomery County (20)
  Charles H. Smelser, Carroll, Frederick, and Howard counties (4)
  Beatrice P. Tignor, Prince George's County (25)
  Thomas M. Yeager, Howard and Prince George's counties (13)
- **Staff contact**
  Doug Mann and Jonathan Lasley
- **Assistant to chairperson**
  Toni Bosworth

The Budget and Taxation Committee considers legislation relating to operating and capital budgets, including revenues and expenditures; supplementary appropriations; state and county bond authorizations; legislative budgetary procedures; taxation and property assessments; and proposals requiring significant expenditures. The committee consists of 13 members. (Frese DP, et al (eds). Maryland Manual. *Annapolis: State Archives. 1991.)*

Economic and Environmental Affairs Committee

Room 200, Senate Office Building
Annapolis, MD 21401-1991
Telephone ext.—3661

- **Chairperson**
  Clarence W. Blount, Baltimore City (41)
- **Vice chairperson**
  Arthur Dorman, Prince George's County (21)
- **Members**
  Michael J. Collins, Baltimore County (6)
  C. Bernard Fowler, Anne Arundel, Calvert, and St. Mary's counties (29)
  Idamae Garrott, Montgomery County (19)
  Paula C. Hollinger, Baltimore County (11)
  Gloria Lawlah, Prince George's County (26)
  Christopher J. McCabe, Howard and Montgomery counties (14)
  American Joe Miedusiewski, Baltimore City (46)
  J. Lowell Stoltzfus, Somerset, Wicomico, and Worcester counties (38)
  Gerald W. Winegrad, Anne Arundel County (30)
- **Staff contacts**
  Carol L. Swan, Lynne B. Rosen, and Simon G. Powell
- **Assistant to chairperson**
  Bobbi Jo Schwartz

The Economic and Environmental Affairs Committee considers legislation relating to agriculture and land preservation; natural resources; alcoholic beverages; housing and economic development; elections; veterans and defense; education; fire prevention and safety; procurement; environmental health; local government; administrative law; government reorganizations and procedures; and business and occupational licensing and regulation (including health occupations). Eleven senators serve on this committee. (Frese DP, et al (eds). Maryland Manual. *Annapolis: State Archives. 1991.)*

This information is accurate as of press time. Please contact the Department of Legislative Reference, ext. 3810, for current information.

Finance Committee

Presidential Wing, Senate Office Building
Annapolis, MD 21401-1991
Telephone ext.—3677

- **Chairperson**
  Thomas Patrick O'Reilly, Prince George's County (22)
- **Vice chairperson**
  James C. Simpson, Charles and St. Mary's counties (28)
- **Members**
  Thomas L. Bromwell, Baltimore County (8)
  George W. Della, Jr., Baltimore City (47)
  Howard A. Denis, Montgomery County (16)
  John W. Derr, Frederick and Washington counties (3)
  John J. Hafer, Allegany and Garrett counties (1)
  Patricia R. Sher, Montgomery County (18)
  Decatur W. Trotter, Prince George's County (24)
  Michael J. Wagner, Anne Arundel County (32)
  Larry Young, Baltimore City (39)
- **Staff contact**
  Stephen M. Ports and Tamela D. Burt
- **Assistant to chairperson**
  Kathleen Smith

The Finance Committee considers legislation relating to banks and financial institutions; credit regulation and consumer financing; commercial law; economic and community development; insurance; horse racing; lottery and gambling; health; pension; transportation; utility regulation; labor and employment; unemployment insurance; and workers' compensation. The committee consists of 11 members. (Frese DP, et al (eds). Maryland Manual. *Annapolis: State Archives. 1991.)*

Judicial Proceedings Committee

Room 300, Senate Office Building
Annapolis, MD 21401-1991
Telephone ext.—3623

- **Chairperson**
  Walter M. Baker, Caroline, Cecil, Kent, Queen Anne's and Talbot counties (36)
- **Vice Chairperson**
  Norman R. Stone, Jr., Baltimore County (7)
- **Members**
  Mary H. Boergers, Montgomery County (17)
  F. Vernon Boozer, Baltimore County (9)
  Habern Freeman, Harford County (34)
  Larry E. Haines, Baltimore and Carroll counties (5)
  Ralph M. Hughes, Baltimore City (40)
  Philip C. Jimeno, Anne Arundel County (31)
  Frederick C. Malkus, Jr., Caroline, Dorchester, Talbot, and Wicomico counties (37)
  Nancy L. Murphy, Baltimore County (12)
  John A. Pica, Jr., Baltimore City (43)
- **Staff contacts**
  Susan H. Russell and Kathleen M. Boucher
- **Assistant to chairperson**
  Jean Stahl

The Judicial Proceedings Committee considers legislation relating to legal aspects of alcoholic beverages; commercial law; consumer protection; corporations and associations; crimes and punishments; criminal and civil procedures; family law; judicial administration and court structure; juvenile justice; law enforcement officials; legal profession; legal rights and immunities; licensing and regulation (law enforcement only); real property; trusts, estates, and probate; constitutional amendments; equal rights and opportunities; ethics; and motor vehicles. Eleven senators serve on this committee. (Frese DP, et al (eds). Maryland Manual. *Annapolis: State Archives. 1991.)*

Calling your representatives in Annapolis is a local call from the Baltimore and Washington areas. From the Baltimore area, dial the exchange 841; from the Washington area, dial the exchange 858; outside the Baltimore/Washington areas, dial 800-492-7122.

House standing committees

Appropriations Committee

Room 131, House Office Building
Annapolis, MD 21401-1991
Telephone ext.—3407

- **Chairperson**
  Howard P. Rawlings, Baltimore City (40)
- **Vice chairperson**
  James E. McClellan, Washington and Frederick counties (3B)
- **Members**
  John C. Astle, Anne Arundel County (30)
  Joseph Bartenfelder, Baltimore County (8)
  Joan Cadden, Anne Arundel County (31)
  Norman H. Conway, Somerset, Wicomico, and Worcester counties (38)
  Ulysses Currie, Prince George's County (25)
  Thomas E. Dewberry, Baltimore County (12)
  Richard N. Dixon, Carroll County (5A)
  George C. Edwards, Allegany and Garrett counties (1A)
  Robert L. Flanagan, Howard and Montgomery counties (14B)
  Jennie M. Forehand, Montgomery County (17)
  Peter Franchot, Montgomery County (20)
  Donald C. Fry, Harford County (35A)
  John G. Gary, Anne Arundel County (33)
  Henry R. Hergenroeder, Jr., Baltimore City (43)
  Martha S. Klima, Baltimore County (9)
  Nancy K. Kopp, Montgomery County (16)
  Timothy F. Maloney, Prince George's County (21)
  Maggie McIntosh, Baltimore City (44)
  Ethel Ann Murray, Cecil County (35B)
  Richard A. Palumbo, Prince George's County (22)
  Samuel M. Parham, Baltimore City (41)
  D. Bruce Poole, Washington County (3A)
  James E. Proctor, Jr., Prince George's County (27)
  Samuel I. Rosenberg, Baltimore City (42)
  Richard Rynd, Baltimore County (11)
  Ellen R. Sauerbrey, Baltimore County (10)
  John Frank Slade III, St. Mary's County (29C)
  Christopher Van Hollen, Jr., Montgomery County (18)
- **Staff contacts**
  Melanie Wenger, Richard Madaleno, and Mark Trogdon
- **Assistant to chairperson**
  Peg McCloskey

Economic Matters Committee

Room 151, House Office Building
Annapolis, MD 21401-1991
Telephone ext.—3519

- **Chairperson**
  Casper R. Taylor, Jr., Allegany and Washington counties (2A)*
  *If Mr. Taylor is elected Speaker of the House, a new chairperson will be appointed for this committee.
- **Vice chairperson**
  Elijah E. Cummings, Baltimore City (39)
- **Members**
  Leon Albin, Baltimore County (11)
  Gary R. Alexander, Prince George's County (27)
  Kumar P. Barve, Montgomery County (17)
  Bennett Bozman, Somerset, Wicomico, and Worcester counties (38)
  Michael Erin Busch, Anne Arundel County (30)
  Gerald J. Curran, Baltimore City (43)
  John P. Donoghue, Washington County (2C)
  Ann Marie Doory, Baltimore City (43)
  Nathaniel Exum, Prince George's County (24)
  Connie C. Galiazzo, Baltimore County (7)
  Hattie N. Harrison, Baltimore City (45)
  John Adams Hurson, Montgomery County (18)
  Christine M. Jones, Prince George's County (26)
  A. Wade Kach, Baltimore County (10)
  Ruth M. Kirk, Baltimore City (39)
  Robert H. Kittleman, Howard and Montgomery counties (14B)
  Charles W. Kolodziejski, Anne Arundel County (31)
  Carolyn J. Krysiak, Baltimore City (46)
  Richard La Vay, Montgomery County (15)
  George H. Littrell, Jr., Frederick County (4A)
  Mary Ann Love, Anne Arundel County (32)
  Martin G. Madden, Howard and Prince George's counties (13B)
  Charles A. McClenahan, Somerset, Wicomico, and Worcester counties (38)
  Louis P. Morsberger, Baltimore County (12)
  Joan B. Pitkin, Prince George's County (23)
  John F. Wood, Jr., Charles and St. Mary's counties (28B)
- **Staff contacts**
  Donna Imhoff and Elizabeth Sammis
- **Assistant to chairperson**
  Nancy Collins

Environmental Matters Committee

Room 161, House Office Building
Annapolis, MD 21401-1991
Telephone ext.—3534

- **Chairperson**
  Ronald A. Guns, Caroline, Cecil, Kent, Queen Anne's, and Talbot counties (36)
- **Vice chairperson**
  Virginia M. Thomas, Howard County (13A)
- **Members**
  Joanne C. Benson, Prince George's County (24)
  Rose Mary Hatem Bonsack, Harford County (34)
  Stephen J. Braun, Charles County (28A)
  Peter G. Callas, Washington County (2B)
  Anthony M. DiPietro, Jr., Baltimore City (46)
  Donald B. Elliott, Carroll and Howard counties (4B)
  Brian E. Frosh, Montgomery County (16)
  James W. Hubbard, Prince George's County (23)
  John D. Jefferies, Baltimore City (39)
  Samuel Q. Johnson III, Caroline, Dorchester, Talbot, and Wicomico counties (37)
  Delores G. Kelley, Baltimore City (42)
  Lawrence A. LaMotte, Baltimore and Carroll counties (5B)
  Brian K. McHale, Baltimore City (47)
  Margaret H. Murphy, Baltimore City (41)
  George W. Owings III, Anne Arundel and Calvert counties (29A)
  Marsha G. Perry, Anne Arundel County (33)
  Paul G. Pinsky, Prince George's County (22)
  Alfred W. Redmer, Jr., Baltimore County (8)
  Jean W. Roesser, Montgomery County (15)
  Kenneth D. Schisler, Caroline, Dorchester, Talbot, and Wicomico counties (37)
  J. Anita Stup, Frederick and Washington counties (3B)
  Victor A. Sulin, Anne Arundel County (32)
  Leonard H. Teitelbaum, Montgomery County (19)
  David M. Valderrama, Prince George's County (26)
  Michael H. Weir, Baltimore County (6)
- **Staff contacts**
  Robert K. Smith and Pegeen Townsend
- **Assistant to chairperson**
  Christine Seabolt

Judiciary Committee

Room 121, House Office Building
Annapolis, MD 21401-1991
Telephone ext.—3488

- **Chairperson**
  Joseph F. Vallario, Jr., Prince George's County (27)
- **Vice chairperson**
  Joel Chasnoff, Montgomery County (14A)
- **Members**
  Curtis S. Anderson, Baltimore City (44)
  Michael Arrington, Prince George's County (25)
  J. Ernest Bell II, Calvert and St. Mary's counties (29B)
  Leon G. Billings, Montgomery County (18)
  Phillip D. Bissett, Anne Arundel County (30)
  Rosa Lee Blumenthal, Prince George's County (26)
  Frank D. Boston, Jr., Baltimore City (41)
  Gerry L. Brewster, Baltimore County (9)
  Dana Lee Dembrow, Montgomery County (20)
  Louis L. DePazzo, Baltimore County (7)
  Cornell N. Dypski, Baltimore City (46)
  Robert L. Ehrlich, Jr., Baltimore County (10)
  Tony E. Fulton, Baltimore City (40)
  Gilbert J. Genn, Montgomery County (16)
  James M. Harkins, Harford County (35A)
  Kevin Kelly, Allegany County (1B)
  E. Farrell Maddox, Baltimore County (6)
  Kenneth H. Masters, Baltimore County (12)
  Richard C. Matthews, Carroll County (5A)
  Pauline H. Menes, Prince George's County (21)
  Kenneth C. Montague, Jr., Baltimore City (44)
  John S. Morgan, Howard and Prince George's counties (13B)
  Carol Stoker Petzold, Montgomery County (19)
  Mary Louise Preis, Harford County (34)
- **Staff contacts**
  Douglas R. Nester and Donald J. Hogan
- **Assistant to chairperson**
  Mary Jane Wallop

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Ways and Means Committee

Room 111, House Office Building
Annpolis, MD 21401-1991
Telephone ext.—3469

- **Chairperson**
  Sheila E. Hixson, Montgomery County (20)
- **Vice chairperson**
  Position vacant at press time
- **Members**
  Charles R. Avara, Baltimore City (47)
  John J. Bishop, Baltimore County (9)
  James W. Campbell, Baltimore City (42)
  Mary A. Conroy, Prince George's County (23)
  Gene W. Counihan, Montgomery County (15)
  David R. Craig, Harford County (34)
  Clarence Davis, Baltimore City (45)
  John W. Douglass, Baltimore City (45)
  C. Ronald Franks, Caroline, Cecil, Kent, Queen Anne's, and Talbot counties (36)
  Michael R. Gordon, Montgomery County (17)
  Thomas H. Hattery, Frederick County (4A)
  Anne Healey, Prince George's County (22)
  Henry B. Heller, Montgomery County (19)
  Carolyn J.B. Howard, Prince George's County (24)
  W. Ray Huff, Anne Arundel County (D)
  Brenda B. Hughes, Prince George's County (25)
  Leslie Hutchinson, Baltimore County (6)
  Theodore Levin, Baltimore County (11)
  Salima Siler Marriott, Baltimore City (40)
  James F. Ports, Jr., Baltimore County (8)
  James C. Rosapepe, Prince George's County (21)
  Elizabeth Smith-Anderson, Anne Arundel County (33)
  Theodore J. Sophocleus, Anne Arundel County (32)
  Michael J. Sprague, Charles County (28A)
  Robert Alan Thornton, Jr., Caroline, Dorchester, Talbot, and Wicomico counties (37)
  Paul Weisengoff, Baltimore City (47)
  Betty Workman, Allegany County (1B)
- **Staff contacts**
  Michael Sanderson and Julie Weinberg
- **Assistant to chairperson**
  Betty Anne O'Neill

The Appropriations Committee considers legislation relating to state operating and capital budgets, including revenues and expenditures; supplementary appropriations; state and county bond authorizations; legislative budgetary procedures; and state personnel and pensions. Twenty-five delegates serve on this committee. (Frese DP, et al (eds). Maryland Manual. *Annapolis: State Archives. 1991.)*

The Economic Matters Committee considers legislation relating to licensing and regulation of businesses and occupations; labor and employment; economic and community development; insurance and banking regulation; unemployment insurance; consumer protection; vehicle laws; and alcoholic beverages. Twenty-three delegates serve on this committee. (Frese DP, et al (eds). Maryland Manual. *Annapolis: State Archives. 1991.)*

The Environmental Matters Committee considers legislation relating to natural resources and the environment, including related occupations and professions; land use planning and zoning; general health; mental health and retardation; and agriculture. This committee is composed of 24 delegates. (Frese DP, et al (eds). Maryland Manual. *Annapolis: State Archives. 1991.)*

The Judiciary Committee considers legislation relating to judicial administration and court structure; legal profession; law enforcement and public safety; crimes and penalties; criminal and civil laws and procedures; juvenile justice; family law; real property; trusts, estates, and probate; corporations; legal rights and immunities; and drunk driving. Twenty-three delegates serve on this committee. (Frese DP, et al (eds). Maryland Manual. *Annapolis: State Archives. 1991.)*

The Ways and Means Committee considers legislation relating to state and local taxation, including property tax credit programs and assessments; financing of state programs and services; education, health, and welfare; transportation; gambling and horse racing; and creation of judgeships. The committee consists of 25 delegates. (Frese DP, et al (eds). Maryland Manual. *Annapolis: State Archives. 1991.)*

This information is accurate as of press time. Please contact the Department of Legislative Reference, ext. 3810, for current information.

Members of the General Assembly, by Legislative District

LEGISLATIVE DISTRICT 1
Garrett and Allegany counties
Sen. John J. Hafer
Del. George C. Edwards (1A)
Del. Kevin Kelly (1B)
Del. Betty Workman (1B)

LEGISLATIVE DISTRICT 2
Allegany and Washington counties
Sen. Donald F. Munson
Del. Casper R. Taylor, Jr. (2A)
Del. Peter G. Callas (2B)
Del. John P. Donoghue (2C)

LEGISLATIVE DISTRICT 3
Washington and Frederick counties
Sen. John W. Derr
Del. D. Bruce Poole (3A)
Del. James E. McClellan (3B)
Del. J. Anita Stup (3B)

LEGISLATIVE DISTRICT 4
Frederick, Carroll, and Howard counties
Sen. Charles H. Smelser
Del. Thomas H. Hattery (4A)
Del. George H. Littrell, Jr. (4A)
Del. Donald B. Elliott (4B)

LEGISLATIVE DISTRICT 5
Carroll and Baltimore counties
Sen. Larry E. Haines
Del. Richard N. Dixon (5A)
Del. Richard C. Matthews (5A)
Del. Lawrence A. LaMotte (5B)

LEGISLATIVE DISTRICT 6
Baltimore County
Sen. Michael J. Collins
Del. Leslie Hutchinson
Del. E. Farrell Maddox
Del. Michael H. Weir

LEGISLATIVE DISTRICT 7
Baltimore County
Sen. Norman R. Stone, Jr.
Del. John S. Arnick
Del. Louis L. DePazzo
Del. Connie C. Galiazzo

LEGISLATIVE DISTRICT 8
Baltimore County
Sen. Thomas L. Bromwell
Del. Joseph Bartenfelder
Del. James F. Ports, Jr.
Del. Alfred W. Redmer, Jr.

LEGISLATIVE DISTRICT 9
Baltimore County
Sen. F. Vernon Boozer
Del. John J. Bishop
Del. Gerry L. Brewster
Del. Martha S. Klima

LEGISLATIVE DISTRICT 10
Baltimore County
Sen. Janice A. Piccinini
Del. Robert L. Ehrlich, Jr.
Del. A. Wade Kach
Del. Ellen R. Sauerbrey

LEGISLATIVE DISTRICT 11
Baltimore County
Sen. Paula C. Hollinger
Del. Leon Albin
Del. Theodore Levin
Del. Richard Rynd

LEGISLATIVE DISTRICT 12
Baltimore County
Sen. Nancy L. Murphy
Del. Thomas E. Dewberry
Del. Kenneth H. Masters
Del. Louis P. Morsberger

LEGISLATIVE DISTRICT 13
Howard and Prince George's counties
Sen. Thomas M. Yeager
Del. Virginia M. Thomas (13A)
Del. Martin G. Madden (13B)
Del. John S. Morgan (13B)

LEGISLATIVE DISTRICT 14
Montgomery and Howard counties
Sen. Christopher J. McCabe
Del. Joel Chasnoff (14A)
Del. Robert L. Flanagan (14B)
Del. Robert H. Kittleman (14B)

LEGISLATIVE DISTRICT 15
Montgomery County
Sen. Laurence Levitan
Del. Gene W. Counihan
Del. Richard LaVay
Del. Jean W. Roesser

LEGISLATIVE DISTRICT 16
Montgomery County
Sen. Howard A. Denis
Del. Brian E. Frosh
Del. Gilbert J. Genn
Del. Nancy K. Kopp

LEGISLATIVE DISTRICT 17
Montgomery County
Sen. Mary H. Boergers
Del. Kumar P. Barve
Del. Jennie M. Forehand
Del. Michael R. Gordon

LEGISLATIVE DISTRICT 18
Montgomery County
Sen. Patricia R. Sher
Del. Leon G. Billings
Del. John Adams Hurson
Del. Christopher Van Hollen, Jr.

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LEGISLATIVE DISTRICT 19
Montgomery County
Sen. Idamae Garrott
Del. Henry B. Heller
Del. Carol Stoker Petzold
Del. Leonard H. Teitelbaum

LEGISLATIVE DISTRICT 20
Montgomery County
Sen. Ida G. Ruben
Del. Dana Lee Dembrow
Del. Peter Franchot
Del. Sheila Ellis Hixson

LEGISLATIVE DISTRICT 21
Prince George's County
Sen. Arthur Dorman
Del. Timothy F. Maloney
Del. Pauline H. Menes
Del. James C. Rosapepe

LEGISLATIVE DISTRICT 22
Prince George's County
Sen. Thomas Patrick O'Reilly
Del. Anne Healey
Del. Richard A. Palumbo
Del. Paul G. Pinsky

LEGISLATIVE DISTRICT 23
Prince George's County
Sen. Leo E. Green
Del. Mary A. Conroy
Del. James W. Hubbard
Del. Joan B. Pitkin

LEGISLATIVE DISTRICT 24
Prince George's County
Sen. Decatur W. Trotter
Del. Joanne C. Benson
Del. Nathaniel Exum
Del. Carolyn J.B. Howard

LEGISLATIVE DISTRICT 25
Prince George's County
Sen. Beatrice P. Tignor
Del. Michael Arrington
Del. Ulysses Currie
Del. Brenda B. Hughes

LEGISLATIVE DISTRICT 26
Prince George's County
Sen. Gloria Gary Lawlah
Del. Rosa Lee Blumenthal
Del. Christine M. Jones
Del. David M. Valderrama

LEGISLATIVE DISTRICT 27
Prince George's County
Sen. Thomas V. 'Mike' Miller, Jr.
Del. Gary R. Alexander
Del. James E. Proctor, Jr.
Del. Joseph F. Vallario, Jr.

LEGISLATIVE DISTRICT 28
Charles and St. Mary's counties
Sen. James C. Simpson
Del. Stephen J. Braun (28A)
Del. Michael J. Sprague (28A)
Del. John F. Wood, Jr. (28B)

LEGISLATIVE DISTRICT 29
Calvert, St. Mary's, and Anne Arundel counties
Sen. C. Bernard Fowler
Del. George W. Owings III (29A)
Del. J. Ernest Bell II (29B)
Del. John Frank Slade III (29C)

LEGISLATIVE DISTRICT 30
Anne Arundel County
Sen. Gerald W. Winegrad
Del. John C. Astle
Del. Phillip D. Bissett
Del. Michael Erin Busch

LEGISLATIVE DISTRICT 31
Anne Arundel County
Sen. Philip C. Jimeno
Del. Joan Cadden
Del. W. Ray Huff
Del. Charles W. Kolodziejski

LEGISLATIVE DISTRICT 32
Anne Arundel County
Sen. Michael J. Wagner
Del. Mary Ann Love
Del. Theodore J. Sophocleus
Del. Victor A. Sulin

LEGISLATIVE DISTRICT 33
Anne Arundel County
Sen. John A. Cade
Del. John G. Gary
Del. Marsha G. Perry
Del. Elizabeth Smith-Anderson

LEGISLATIVE DISTRICT 34
Harford County
Sen. Habern Freeman
Del. Rose Mary Hatem Bonsack
Del. David R. Craig
Del. Mary Louise Preis

LEGISLATIVE DISTRICT 35
Harford and Cecil counties
Sen. William H. Amoss
Del. Donald C. Fry (35A)
Del. James M. Harkins (35A)
Del. Ethel Ann Murray (35B)

LEGISLATIVE DISTRICT 36
Kent, Queen Anne's, Cecil, Caroline, and Talbot counties
Sen. Walter M. Baker
Del. C. Ronald Franks
Del. Ronald A. Guns
Del. R. Clayton Mitchell, Jr.

LEGISLATIVE DISTRICT 37
Dorchester, Caroline, Talbot, and Wicomico counties
Sen. Frederick C. Malkus, Jr.
Del. Samuel Q. Johnson III
Del. Kenneth D. Schisler
Del. Robert Alan Thornton, Jr.

This information is accurate as of press time. Please contact the Department of Legislative Reference, ext. 3810, for current information.

MEMBERS BY LEGISLATIVE DISTRICT

LEGISLATIVE DISTRICT 38
Somerset, Worcester, and Wicomico counties
Sen. J. Lowell Stoltzfus
Del. Bennett Bozman
Del. Norman H. Conway
Del. Charles A. McClenahan

LEGISLATIVE DISTRICT 39
Baltimore City
Sen. Larry Young
Del. Elijah E. Cummings
Del. John D. Jefferies
Del. Ruth M. Kirk

LEGISLATIVE DISTRICT 40
Baltimore City
Sen. Ralph M. Hughes
Del. Tony E. Fulton
Del. Salima Siler Marriott
Del. Howard P. Rawlings

LEGISLATIVE DISTRICT 41
Baltimore City
Sen. Clarence W. Blount
Del. Frank D. Boston, Jr.
Del. Margaret H. Murphy
Del. Samuel M. Parham

LEGISLATIVE DISTRICT 42
Baltimore City
Sen. Barbara A. Hoffman
Del. James W. Campbell
Del. Delores G. Kelley
Del. Samuel I. Rosenberg

LEGISLATIVE DISTRICT 43
Baltimore City
Sen. John A. Pica, Jr.
Del. Gerald J. Curran
Del. Ann Marie Doory
Del. Henry R. Hergenroeder, Jr.

LEGISLATIVE DISTRICT 44
Baltimore City
Sen. Julian L. Lapides
Del. Curtis S. Anderson
Del. Maggie McIntosh
Del. Kenneth C. Montague, Jr.

LEGISLATIVE DISTRICT 45
Baltimore City
Sen. Nathan C. Irby, Jr.
Del. Clarence Davis
Del. John W. Douglass
Del. Hattie N. Harrison

LEGISLATIVE DISTRICT 46
Baltimore City
Sen. American Joe Miedusiewski
Del. Anthony M. DiPietro, Jr.
Del. Cornell N. Dypski
Del. Carolyn J. Krysiak

LEGISLATIVE DISTRICT 47
Baltimore City
Sen. George W. Della, Jr.
Del. Charles R. Avara
Del. Brian K. McHale
Del. Paul Weisengoff

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Members of the Senate, alphabetically with addresses

▼ **Amoss, William H.** *(Dist. 35)*
Session..... 401 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3603
District..... 2303 Bel Air Rd.
address..... P.O. Box 496
Fallston 21047-0496
410-838-7555
410-879-7272
Member
since ..... 1983 (House 1975-1982)

▼ **Baker, Walter M.** *(Dist. 36)*
Session..... 301 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3639
District..... 153 East Main St.
address..... Elkton 21921-5975
410-398-0980
Member
since 1979

▼ **Blount, Clarence W.** *(Dist. 41)*
Session..... 201 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3697
District 4811 Liberty Hghts. Ave.
address..... Baltimore 21207-7193
410-466-1197
Member
since 1971

▼ **Boergers, Mary H.** *(Dist. 17)*
Session..... 208 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3134
District..... 4417 Puller Dr.
address..... Kensington 20895-4070
301-564-0508
Member
since ..... 1991 (House 1981-1990)

▼ **Boozer, F. Vernon** *(Dist. 9)*
Session..... 410 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3706
District..... 614 Bosley Ave.
address..... Towson 21204-4066
410-828-0669
Member
since ..... 1981 (House 1971-1979)

▼ **Bromwell, Thomas L.** *(Dist. 8)*
Session..... 215 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3620
District..... 215 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3620
Member
since ..... 1983 (House 1979-1983)

▼ **Cade, John A.** *(Dist. 33)*
Session..... 407 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3568
District..... 407 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3568
Member
since 1975

▼ **Collins, Michael J.** *(Dist. 6)*
Session..... 211 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3642
District..... 418 Eastern Blvd.
address..... Baltimore 21221-6786
410-391-7800
Member
since ..... 1986 (House 1978-1986)

▼ **Della, George W., Jr.** *(Dist. 47)*
Session..... 207 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3600
District..... 801 Light St., 2nd Fl.
address..... Baltimore 21230-3912
410-224-8400
Member
since..... 1983

▼ **Denis, Howard A.** *(Dist. 16)*
Session..... 402B Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3124
District..... 402B Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3124
Member
since..... 1977

▼ **Derr, John W.** *(Dist. 3)*
Session..... 408 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3575
District..... 13 West Second St.
address..... Frederick 21701-5326
301-695-5733
Member
since..... 1983

▼ **Dorman, Arthur** *(Dist. 21)*
Session..... 303 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3141
District..... 303 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3141
Member
since..... 1975 (House 1965-1975)

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MEMBERS OF THE SENATE

▼ **Fowler, C. Bernard** *(Dist. 29)*
Session..... 210 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3673
District .... 65 Duke St.
address .... P.O. Box 459
Prince Frederick 20678-0459
410-535-3366
Member
since 1983

▼ **Freeman, Habern** *(Dist. 34)*
Session..... 302 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3158
District .... 2208 Old Emmorton Rd.,
address .... Suite 102
Bel Air 21015-8909
410-515-1603
Member
since 1991

▼ **Garrott, Idamae** *(Dist. 19)*
Session..... 304 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3151
District .... 304 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3151
Member
since ..... 1987 (House 1979-1987)

▼ **Green, Leo E.** *(Dist. 23)*
Session..... 212 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3631
District .... 3123 Belair Dr.
address .... Bowie 20715-3198
301-262-4420
Member
since ..... 1983 (House 1975-1979)

▼ **Hafer, John J.** *(Dist. 1)*
Session..... 406 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3565
District .... 58 Frost Ave.
address .... P.O. Box 116
Frostburg 21532-0116
301-689-4666
Member
since 1991

▼ **Haines, Larry E.** *(Dist. 5)*
Session..... 403 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3683
District .... 532 Baltimore Blvd.
address .... Westminster 21157
410-876-4530
Member
since 1991

▼ **Hoffman, Barbara A.** *(Dist. 42)*
Session..... 100 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3648
District .... 6615 Reisterstown Rd.
address .... Suite 301
Baltimore 21215-2603
410-764-3614
Member
since 1983

▼ **Hollinger, Paula C.** *(Dist. 11)*
Session..... 206 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3131
District .... 206 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3131
Member
since ..... 1987 (House 1979-1987)

▼ **Hughes, Ralph M.** *(Dist. 40)*
Session..... 310 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3656
District .... 2320 North Monroe St.
address .... Baltimore 21217-1398
410-225-0555
Member
since ..... 1991 (House 1983-1990)

▼ **Irby, Nathan C., Jr.** *(Dist. 45)*
Session..... 214 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3165
District .... 2021 East Biddle St.
address .... Baltimore 21213-3345
410-675-3000
Member
since 1983

▼ **Jimeno, Philip C.** *(Dist. 31)*
Session..... 305 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3658
District .... 5915 Manor House Lane
address .... Baltimore 21225-3359
410-636-4134
Member
since ..... 1985 (House 1979-1985)

▼ **Lapides, Julian L.** *(Dist. 44)*
Session..... 116 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3686
District .... 807 Cathedral St.
address .... Baltimore 21201-5281
410-752-4519
Member
since ..... 1967 (House 1963-1967)

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▼ **Lawlah, Gloria Gary** *(Dist. 26)*
Session..... 307 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3092
District .... Rivertowne Commons
address .... 6133 Oxon Hill Rd.
Oxon Hill 20745-3108
301-839-0868
Member
since ..... 1991 (House 1987-1990)

▼ **Levitan, Laurence** *(Dist. 15)*
Session..... 100 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3169
District .... 100 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3169
Member
since ..... 1975 (House 1971-1974)

▼ **Malkus, Frederick C., Jr.**
(Dist. 37)
Session..... 121 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3590
District .... 500 Spring St.
address .... P.O. Box 316
Cambridge 21613-0316
410-228-1911
Member
since ..... 1951 (House 1947-1951)

▼ **McCabe, Christopher J.** *(Dist. 14)*
Session..... 404 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3671
District .... 12400 Clarksville Pike
address .... Clarksville 21029-1225
410-988-9818
Member
since 1991

▼ **Miedusiewski, American Joe**
(Dist. 46)
Session..... 311 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3598
District .... 421 S. Highland Ave.
address .... Baltimore 21224-2314
410-276-8225
Member
since ..... 1988 (House 1975-1988)

▼ **Miller, Thomas V. 'Mike,' Jr.**
(Dist. 27)
Session..... H-107 State House
address .... Annapolis 21401-1991
ext. 3700
District .... H-107 State House
address .... Annapolis 21401-1991
ext. 3700
Member
since ..... 1975 (House 1971-1975)

▼ **Munson, Donald F.** *(Dist. 2)*
Session..... 405 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3609
District .... 28 West Church St.
address .... Hagerstown 21740-4808
301-791-4511
Member
since ..... 1991 (House 1975-1990)

▼ **Murphy, Nancy L.** *(Dist. 12)*
Session..... 205 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3653
District .... 1330 Sulphur Spring Rd.
address .... 2nd Fl.
Arbutus 21227-2794
410-242-5699
Member
since ..... 1989 (House 1983-1989)

▼ **O'Reilly, Thomas Patrick**
(Dist. 22)
Session..... P.W. Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3155
District .... P.W. Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3155
Member
since 1975

▼ **Pica, John A., Jr.** *(Dist. 43)*
Session..... 402A Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3145
District .... 402A Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3145
Member
since ..... 1983 (House 1979-1982)

▼ **Piccinini, Janice A.** *(Dist. 10)*
Session..... 308 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3606
District .... 204 River Way Ct., 104
address .... Suite 104
Owings Mills 21117-5712
410-363-4700
Member
since 1991

▼ **Ruben, Ida G.** *(Dist. 20)*
Session..... 204 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3634
District .... 204 Senate Office Bldg.
address .... Annapolis 21401-1991
ext. 3634
Member
since ..... 1987 (House 1975-1987)

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MEMBERS OF THE SENATE

Sher, Patricia R. *(Dist. 18)*
Session..... P.W. Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3137
District..... 2905 Barker St.
address..... Silver Spring 20910
301-589-1555
Member
since..... 1991 (House 1979-1990)

Simpson, James C. *(Dist. 28)*
Session..... 316 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3616
District..... 1057 St. Ignatius Dr.
address..... Suite 120
P.O. Box 188
Waldorf 20604-0188
301-843-1882
301-645-2235
Member
since..... 1975

Smelser, Charles H. *(Dist. 4)*
Session..... 100 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3704
District..... 100 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3704
Member
since..... 1967 (House 1955-1963)

Stoltzfus, J. Lowell *(Dist. 38)*
Session..... 409 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3645
District..... 30487 Broad St.
address..... Princess Anne 21853-1211
410-651-3886
410-742-3999
Member
since..... 1992 (House 1992)

Stone, Norman R., Jr. *(Dist. 7)*
Session..... 216 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3587
District..... 6905 Dunmanway
address..... Baltimore 21222-5194
410-288-5270
Member
since..... 1967 (House 1963 -1967)

Tignor, Beatrice P. *(Dist. 25)*
Session..... 202 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3127
District..... 170 Old Enterprise Rd.
address..... Upper Marlboro 20772-1645
301-808-3851
Member
since..... 1993 (House 1991-1991)

Trotter, Decatur W. *(Dist. 24)*
Session..... 313 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3148
District..... 1891 Brightseat Rd.
address..... Landover 20785-4256
301-772-2800
Member
since..... 1983 (House 1975-1979)

Wagner, Michael J. *(Dist. 32)*
Session..... 209 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3593
District..... Arundel Center North
address..... Suite 510
101 Crain Highway, N.W.
Glen Burnie 21061-3060
410-760-6453
Member.... 1983 (also 1977-1979)
since..... (House 1975-1977)

Winegrad, Gerald W. *(Dist. 30)*
Session..... 314 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3578
District..... 314 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3578
Member
since ..... 1983 (House 1978-1983)

Yeager, Thomas M. *(Dist. 13)*
Session..... 309 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3572
District..... 413 Main St.
address..... Laurel 20707-4176
301-498-3400
Member
since 1983

Young, Larry *(Dist. 39)*
Session..... 306 Senate Office Bldg.
address..... Annapolis 21401-1991
ext. 3612
District..... 1716 McCulloh St.
address..... Baltimore 21217-3434
410-523-6650
Member
since ..... 1988 (House 1975-1987)

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Members of the House, alphabetically with addresses

▼ **Albin, Leon** *(Dist. 11)*
Session..... 310 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3342
District..... 6512 Edenvale Rd.
address ..... Baltimore 21209-2721
410-486-1365
Member
since 1987

▼ **Alexander, Gary R.** *(Dist. 27)*
Session..... 141 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3391
District..... Fort Washington
address..... Professional Park
11414 Livingston Rd.
Fort Washington
20744-5146
301-292-3300
Member
since 1983

▼ **Anderson, Curtis S.** *(Dist. 44)*
Session..... 301 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3259
District..... 2225 St. Paul St.
address..... Baltimore 21218-5806
410-467-4444
Member
since 1983

▼ **Arnick, John S.** *(Dist. 7)*
Session..... 303 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3334
District..... 7918 Diehlwood Rd.
address..... Dundalk 21222-3316
410-285-2109
Member
since 1983 (1967-1979)

▼ **Arrington, Michael** *(Dist. 25)*
Session..... 203 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3076
District..... 642 Mt. Lubentia Ct. E.
address..... Largo 20772-2071
410-841-3076
Member
since 1991

▼ **Astle, John C.** *(Dist. 30)*
Session..... 212 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3209
District..... 212 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3209
Member
since 1983

▼ **Avara, Charles R.** *(Dist. 47)*
Session..... 429 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3547
District..... 3508 Coolidge Ave.
address..... Baltimore 21229-5110
410-644-3057
Member
since 1967

▼ **Bartenfelder, Joseph** *(Dist. 8)*
Session..... 307 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3365
District..... 8336 Belair Rd.
address..... Baltimore 21236-3421
410-529-2144
Member
since 1983

▼ **Barve, Kumar P.** *(Dist. 17)*
Session..... 224 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3046
District..... 11 Pontiac Way
address..... Gaithersburg 20878-2743
301-869-1488
Member
since 1991

▼ **Bell, J. Ernest, II** *(Dist. 29B)*
Session..... 217 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3314
District..... 10 Court House Dr.
address..... P.O. Box 362
Leonardtown 20650-0362
301-475-8421
Member
since 1983

▼ **Benson, Joanne C.** *(Dist. 24)*
Session..... 204 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3065
District..... 1891 Brightseat Rd.
address..... Landover 20785-4256
301-772-2802
Member
since 1991

▼ **Billings, Leon G.** *(Dist. 18)*
Session..... 225 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3037
District..... 3940 Rickover Rd.
address..... Silver Spring 20902-2329
301-946-5916
Member
since 1991

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MEMBERS OF THE HOUSE

▼ **Bishop, John J.** *(Dist. 9)*
Session..... 308 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3359
District..... 7905 Oakdale Ave.
address..... Baltimore 21234-5501
410-661-5408
Member
since..... 1987

▼ **Bissett, Phillip D.** *(Dist. 30)*
Session..... 212 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3211
District..... 212 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3211
Member
since..... 1991

▼ **Blumenthal, Rosa Lee** *(Dist. 26)*
Session..... 205 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3012
District..... 4400 Stamp Rd.
address..... Suite 212
Temple Hills 20748-6728
301-423-4130
Member
since..... 1987

▼ **Bonsack, Rose Mary Hatem** *(Dist. 34)*
Session..... 326 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3289
District..... 118 West Bel Air Ave.
address..... Aberdeen 21001-3238
410-273-9549
Member
since..... 1991

▼ **Boston, Frank D., Jr.** *(Dist. 41)*
Session..... 314 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3283
District..... 2200 Garrison Blvd.
address..... Suite 202
Baltimore 21216-2631
410-566-3373
Member
since..... 1987

▼ **Bozman, Bennett** *(Dist. 38)*
Session..... 413 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3431
District..... 103 Cedar Ave.
address..... Berlin 21811-1138
410-641-2221
Member
since..... 1991

▼ **Braun, Stephen J.** *(Dist. 28A)*
Session..... 216 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3247
District..... Waldorf Commercial Ctr.
address..... P.O. Box 2037
Waldorf 20604-2037
301-932-5812
Member
since..... 1991

▼ **Brewster, Gerry L.** *(Dist. 9)*
Session..... 308 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3359
District..... 527 Allegheny Ave.
address..... Towson 21204-4233
410-821-1991
Member
since..... 1991

▼ **Busch, Michael Erin** *(Dist. 30)*
Session..... 212 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3211
District..... 212 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3211
Member
since 1987

▼ **Cadden, Joan** *(Dist. 31)*
Session..... 213 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3217
District..... 111 Cedar Hill Rd.
address..... Brooklyn Park 21225-3903
410-789-1914
Member
since 1991

▼ **Callas, Peter G.** *(Dist. 2B)*
Session..... 423 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3449
District..... 35 Day View Dr.
address..... Hagerstown 21740-6712
301-739-0212
Member
since 1983

▼ **Campbell, James W.** *(Dist. 42)*
Session..... 320 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3297
District..... 1329 1/2 West 41st St.
address..... Baltimore 21211-1550
410-366-8160
Member
since 1979

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▼ **Chasnoff, Joel** *(Dist. 14A)*
Session..... 121 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3052
District..... 210 Olney Bldg.
address..... 17904 Georgia Ave.
P.O. Box 1000
Olney 20830-1000
301-924-4200
Member
since..... 1975

▼ **Conroy, Mary A.** *(Dist. 23)*
Session..... 208 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3098
District..... 208 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3098
Member
since..... 1986 (Senate 1982-1983)

▼ **Conway, Norman H.** *(Dist. 38)*
Session..... 416 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3425
District..... 1312 Whittier Dr.
address..... Salisbury 21801-3241
410-543-9060
Member
since..... 1987

Counihan, Gene W. (*Dist. 15*)
Session..... 222 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3001
District..... 9901 Dellcastle Rd.
address..... Gaithersburg 20879-1322
301-977-5045
Member
since..... 1983

▼ **Craig, David R** *(Dist. 34)*
Session..... 326 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3289
District..... 368 Congress Ave.
address..... Havre de Grace 21078-3029
410-939-9398
Member
since..... 1991

▼ **Cummings, Elijah E.** *(Dist. 39)*
Session..... 151 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3263
District..... 2300 North Calvert St.
address..... Suite 100
Baltimore 21218-5201
410-366-7212
Member
since..... 1983

▼ **Curran, Gerald J.** *(Dist. 43)*
Session..... 321 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3308
District..... Cromwell Ctr.
address..... Suite 201
810 Gleneagles Ct.
Towson 21286-2203
410-821-2920
Member
since..... 1967

▼ **Currie, Ulysses** *(Dist. 25)*
Session..... 203 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3076
District..... 6621 Lacona St.
address..... District Heights 20747-2840
301-967-6602
Member
since..... 1987

▼ **Davis, Clarence** *(Dist. 45)*
Session..... 323 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3325
District..... P.O. Box 33167
address..... Baltimore 21218
410-366-0483
Member
since..... 1983

▼ **Dembrow, Dana Lee** *(Dist. 20)*
Session..... 226 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3200
District..... 10111 Colesville Rd.
address..... Suite 117
Silver Spring 20901-2427
301-593-5359
Member
since..... 1987

▼ **DePazzo, Louis L.** *(Dist. 7)*
Session..... 305 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3334
District..... 38 S. Dundalk Ave.
address..... Baltimore 21222-4266
410-288-9303
Member
since..... 1979

▼ **Dewberry, Thomas E.** *(Dist. 12)*
Session..... 304 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3378
District..... 1 Newburg Ave.
address..... Baltimore 21228
410-747-0407
Member
since..... 1989

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MEMBERS OF THE HOUSE

▼ **DiPietro, Anthony M., Jr.** *(Dist. 46)*
Session..... 316 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3303
District..... 3607 Belair Rd.
address..... Baltimore 21213-1208
410-325-5400
Member
since..... 1979

▼ **Dixon, Richard N.** *(Dist. 5A)*
Session..... 306 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3371
District 1224 Western Chapel Rd.
address..... New Windsor 21776-6945
410-848-6945
Member
since..... 1983

▼ **Donoghue, John P.** *(Dist. 2C)*
Session..... 422 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3447
District..... 49 Summit Ave.
address..... Hagerstown 21740-5522
301-790-3780
Member
since..... 1991

▼ **Doory, Ann Marie** *(Dist. 43)*
Session..... 424 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3460
District..... 112 Taplow Rd.
address..... Baltimore 21212-3312
410-323-0401
Member
since..... 1987

▼ **Douglass, John W.** *(Dist. 45)*
Session..... 323 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3325
District..... 1535 East North Ave.
address..... Baltimore 21213-1480
410-752-6653
Member
since..... 1971

▼ **Dypski, Cornell N.** *(Dist. 46)*
Session..... 316 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3303
District..... 638 South Decker Ave.
address..... Baltimore 21224-3911
410-276-1974
Member
since..... 1987 (Senate 1975-1983)

▼ **Edwards, George C.** *(Dist. 1A)*
Session..... 411 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3435
District..... 23 N. Pennsylvania Ave.
address..... P.O. Box 8
Grantsville 21536-0008
301-895-5720
Member
since..... 1983

▼ **Ehrlich, Robert L., Jr.** *(Dist. 10)*
Session..... 309 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3350
District..... 5 Elphin Court
address..... Suite 102
Timonium 21093-1831
410-252-4180
Member
since..... 1987

▼ **Elliott, Donald B.** *(Dist. 4B)*
Session..... 306 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3371
District..... 204 Lambert Ave.
address..... P.O. Box 370
New Windsor 21776-0370
410-848-5373
Member
since 1987

▼ **Exum, Nathaniel** *(Dist. 24)*
Session..... 204 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3065
District..... 1891 Brightseat Rd.
address..... Landover 20785-4256
301-772-2801
Member
since 1975

▼ **Flanagan, Robert L.** *(Dist. 14B)*
Session..... 226 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3200
District..... 12400 Clarksville Pike
address..... Clarksville 21029-1225
410-988-9818
Member
since 1987

▼ **Forehand, Jennie M.** *(Dist. 17)*
Session..... 223 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3028
District..... 712 Smallwood Rd.
address..... Rockville 20850-2144
301-762-4772
Member
since 1978

Calling your representatives in Annapolis is a local call from the Baltimore and Washington areas. From the Baltimore area, dial the exchange 841; from the Washington area, dial the exchange 858; outside the Baltimore/Washington areas, dial 800-492-7122.

▼ **Franchot, Peter** *(Dist. 20)*
Session..... 220 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3045
District .... 7111 Sycamore Ave.
address .... Takoma Park 20912-4634
301-270-8417
Member
since 1987

▼ **Franks, C. Ronald** *(Dist. 36)*
Session..... 405 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3410
District .... 313 Winchester Creek Rd.
address .... Grasonville 21638-9741
410-758-3794
Member
since 1991

▼ **Frosh, Brian E.** *(Dist. 16)*
Session..... 222 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3001
District .... 7315 Wisconsin Ave.
address .... Suite 800 West
Bethesda 20814-3202
301-652-2888
Member
since 1987

▼ **Fry, Donald C.** *(Dist. 35A)*
Session..... 326 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3289
District .... 1714 W. Jarrettsville Rd.
address .... Jarrettsville 21084-1524
410-836-6747
Member
since 1991

▼ **Fulton, Tony E.** *(Dist. 40)*
Session..... 317 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3277
District .... 3501 Dennlyn Rd.
address .... Baltimore 21215-7416
410-578-1817
Member
since 1987

▼ **Galiazzo, Connie C.** *(Dist. 7)*
Session..... 305 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3334
District .... 305 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3334
Member
since 1991

▼ **Gary, John G.** *(Dist. 33)*
Session..... 215 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3223
District .... 215 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3223
Member
since 1983

▼ **Genn, Gilbert J.** *(Dist. 16)*
Session..... 224 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3011
District .... 1 Central Plaza
address .... Suite 1008
11300 Rockville Pike
Rockville, 20852-3035
301-881-7700
Member
since 1987

▼ **Gordon, Michael R.** *(Dist. 17)*
Session..... 223 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3028
District .... 416 Hungerford Dr.
address .... Suite 330
Rockville 20850-4127
301-294-2100
Member
since 1983

▼ **Guns, Ronald A.** *(Dist. 36)*
Session..... 161 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3534
District .... 107 Railroad Ave.
address .... Elkton 21921-5535
410-392-4422
Member
since 1983

▼ **Harkins, James M.** *(Dist. 35A)*
Session..... 326 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3289
District .... 4 East Jarrettsville Rd.
address .... P.O. Box 149
Forest Hill 21050-0149
410-838-6636
Member
since 1991

▼ **Harrison, Hattie N.** *(Dist. 45)*
Session..... 427 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3486
District .... 1054 N. Milton Ave.
address .... Baltimore 21205-1319
410-342-4414
Member
since 1973

This information is accurate as of press time. Please contact the Department of Legislative Reference, ext. 3810, for current information.

▼ **Hattery, Thomas H.** *(Dist. 4A)*
Session..... 209 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3107
District .... P.O. Box 88
address .... Mt. Airy 21771-0088
301-694-0123
Member
since 1983

▼ **Healey, Anne** *(Dist. 22)*
Session..... 207 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3058
District .... 3920 Madison St.
address .... Hyattsville 20781-1749
301-779-4515
Member
since 1991

▼ **Heller, Henry B.** *(Dist. 19)*
Session..... 430 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3528
District .... 12706 Turkey Br. Pkwy.
address .... Rockville 20853-3443
301-949-4265
Member
since 1987

▼ **Hergenroeder, Henry R., Jr.** *(Dist. 43)*
Session..... 321 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3308
District .... 344 Homeland Southway
address .... Baltimore 21212-4100
410-433-4093
Member
since 1967

▼ **Hixson, Sheila Ellis** *(Dist. 20)*
Session..... 100 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3521
District .... 1008 Broadmore Circle
address .... Silver Spring 20904-3108
301-384-4739
Member
since 1976

▼ **Howard, Carolyn J.B.** *(Dist. 24)*
Session..... 204 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3065
District .... 1891 Brightseat Rd.
address .... Landover 20785-4256
301-772-2803
Member
since ..... 1991 (also 1988-1990)

▼ **Hubbard, James W.** *(Dist. 23)*
Session..... 208 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3103
District .... 13305 Gallery Ct.
address .... Bowie 20720-3866
301-464-6326
Member
since 1992

▼ **Huff, W. Ray** *(Dist. 31)*
Session..... 213 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3217
District .... 8349 Ritchie Highway
address .... Pasadena 21122-3997
410-647-1111
Member
since 1987

▼ **Hughes, Brenda B.** *(Dist. 25)*
Session..... 203 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3076
District .... 706 Iona Terrace
address .... Capital Heights 20743-3310
301-350-1532
Member
since 1993

▼ **Hurson, John Adams** *(Dist. 18)*
Session..... 224 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3046
District .... 14 Kentbury Way
address .... Bethesda 20814-4620
301-654-3513
Member
since 1991

▼ **Hutchinson, Leslie** *(Dist. 6)*
Session..... 303 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3384
District .... 435 Eastern Blvd.
address .... Baltimore 21221-6715
410-780-3636
Member
since 1991

▼ **Jefferies, John D.** *(Dist. 39)*
Session..... 315 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3263
District .... 501-C Pennsylvania Ave.
address .... Baltimore 21201-1949
410-383-2701
Member
since 1988

Calling your representatives in Annapolis is a local call from the Baltimore and Washington areas. From the Baltimore area, dial the exchange 841; from the Washington area, dial the exchange 858; outside the Baltimore/Washington areas, dial 800-492-7122.

▼ **Johnson, Samuel Q., III** *(Dist. 37)*
Session..... 415 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3427
District..... Route 1, Box 300
address..... Tyaskin 21865-9705
410-873-3122
Member
since..... 1983

▼ **Jones, Christine M.** *(Dist. 26)*
Session..... 205 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3012
District..... 3518 Everest Dr.
address..... Hillcrest Heights
Temple Hills 20748-1220
301-423-7145
Member
since..... 1982

▼ **Kach, A. Wade** *(Dist. 10)*
Session..... 309 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3350
District..... 214 Ashland Rd.
address..... Cockeysville 21030-1902
410-527-1962
Member
since..... 1975

▼ **Kelley, Delores G.** *(Dist. 42)*
Session..... 320 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3297
District..... 6615 Reisterstown Rd.
address..... Suite 301
Baltimore 21215-2603
410-764-3614
Member
since..... 1991

▼ **Kelly, Kevin** *(Dist. 1B)*
Session..... 319 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3454
District..... 201 Washington St.
address..... Cumberland 21502-2826
301-777-9000
Member
since..... 1987

▼ **Kirk, Ruth M.** *(Dist. 39)*
Session..... 315 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3263
District..... 501-C Pennsylvania Ave.
address..... Baltimore 21201-1949
410-383-2701
Member
since..... 1983

▼ **Kittleman, Robert H.** *(Dist. 14B)*
Session..... 312 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3401
District..... 12400 Clarksville Pike
address..... Clarksville 21029-1225
410-988-9818
Member
since..... 1983

▼ **Klima, Martha S.** *(Dist. 9)*
Session..... 308 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3359
District..... 1403 Newport Place
address..... Lutherville 21093-5920
410-337-2799
Member
since..... 1983

▼ **Kolodziejski, Charles W.** *(Dist. 31)*
Session..... 213 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3217
District..... 168 Carvel Beach Rd.
address..... Baltimore 21226-1947
410-255-2043
Member
since..... 1983

▼ **Kopp, Nancy K.** *(Dist. 16)*
Session..... 221 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3019
District..... 6301 Dahlonega Rd.
address..... Bethesda 20816-2103
301-229-0385
Member
since..... 1975

▼ **Krysiak, Carolyn J.** *(Dist. 46)*
Session..... 316 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3303
District..... 364 Cornwall St.
address..... Baltimore 21224-2710
410-633-2927
Member
since..... 1991

▼ **LaMotte, Lawrence A.** *(Dist. 5B)*
Session..... 209 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3109
District..... 5 Pleasant Ridge Dr.
address..... Suite 112
Owings Mills 21117-2554
410-581-7056
Member
since..... 1983

This information is accurate as of press time. Please contact the Department of Legislative Reference, ext. 3810, for current information.

▼ **La Vay, Richard** *(Dist. 15)*
Session..... 220 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3090
District .... 220 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3090
Member
since 1991

▼ **Levin, Theodore** *(Dist. 11)*
Session..... 310 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3342
District .... 114 Slade Ave.
address .... Baltimore 21208-4998
410-486-0462
Member
since 1975

▼ **Littrell, Jr., George H.** *(Dist. 4A)*
Session..... 209 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3107
District .... 5209 Reel's Mill Rd.
address .... Frederick 21701-7320
301-662-4367
Member
since 1983

▼ **Love, Mary Ann** *(Dist. 32)*
Session..... 215 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3233
District .... Arundel Center North
address .... Suite 510
101 Crain Highway N.W.
Glen Burnie 21061-3060
410-761-9963
Member
since 1993

▼ **Madden, Martin G.** *(Dist. 13B)*
Session..... 219 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3201
District .... 8610 Washington Blvd.
address .... Suite 210B
Jessup 20794-9499
301-776-0806
Member
since 1991

▼ **Maddox, E. Farrell** *(Dist. 6)*
Session..... 305 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3332
District .... 418 Eastern Blvd.
address .... Baltimore 21221-6786
410-391-7800
Member
since 1986

▼ **Maloney, Timothy F.** *(Dist. 21)*
Session..... 313 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3315
District .... 313 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3315
Member
since 1979

▼ **Marriott, Salima Siler** *(Dist. 40)*
Session..... 317 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3277
District .... 4515 Homer Ave.
address .... Baltimore 21215-6302
410-664-1228
Member
since 1991

▼ **Masters, Kenneth H.** *(Dist. 12)*
Session..... 304 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3378
District .... 304 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3378
Member
since 1979

▼ **Matthews, Richard C.** *(Dist. 5A)*
Session..... 306 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3371
District .... 1309 Taylor St.
address .... Hampstead 21074-2217
410-239-7600
Member
since 1967

▼ **McClellan, James E.** *(Dist. 3B)*
Session..... 324 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3240
District .... 215 Rockwell Terrace
address .... Frederick 21701-4925
301-662-3804
Member
since 1979

▼ **McClenahan, Charles A.** *(Dist. 38)*
Session..... 412 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3433
District .... 4988 Annemessex Rd.
address .... Crisfield 21817-0870
410-968-0870
Member
since 1992

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▼ **McHale, Brian K.** *(Dist. 47)*
Session..... 322 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3319
District..... 801 Light St.
address..... 2nd Floor
Baltimore 21230-3912
410-244-8400
Member
since..... 1990

▼ **McIntosh, Maggie** (Dist. 44)
Session..... 301 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3257
District..... Northwood Shopping Ctr.
address..... 1532 Havenwood Rd.
Baltimore 21218-1694
410-243-3904
Member
since..... 1992

▼ **Menes, Pauline H.** *(Dist. 21)*
Session..... 201 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3074
District..... 3517 Marlbrough Way
address..... College Park 20740-3925
301-935-6270
Member
since..... 1967

▼ **Mitchell, Clayton R., III*** *(Dist. 36)*
Session..... H-101 State House
address..... Annapolis 21401-1991
ext. 3800
District..... H-101 State House
address..... Annapolis 21401-1991
ext. 3800
Member
since..... 1971

▼ **Montague, Kenneth C., Jr.** *(Dist. 44)*
Session..... 301 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3257
District..... Northwood Shopping Ctr.
address..... 1532 Havenwood Rd.
Baltimore 21218-1694
410-243-3904
Member
since 1987

▼ **Morgan, John S.** *(Dist. 13B)*
Session..... 219 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3201
District..... 8610 Washington Blvd.
address..... Suite 210B
Jessup 20794-9499
301-776-0806
Member
since 1991

▼ **Morsberger, Louis P.** *(Dist. 12)*
Session..... 304 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3378
District..... 1 Newburg Ave.
address..... Catonsville 21228-5108
410-747-0407
Member
since 1975

▼ **Murphy, Margaret H.** *(Dist. 41)*
Session..... 314 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3283
District..... 4811 Liberty Hghts. Ave.
address..... Baltimore 21207-7193
410-367-5811
Member
since 1978

▼ **Murray, Ethel Ann** *(Dist. 35B)*
Session..... 403 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3444
District..... 553 Jackson Hall School Rd.
address..... Elkton 21921-2941
410-398-2040
Member
since 1983

▼ **Owings, George W., III** *(Dist. 29A)*
Session..... 217 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3231
District..... P.O. Box 1177
address..... 8217 Bayside Rd.
Chesapeake Beach 20732-1177
301-855-4100
Member
since 1988

▼ **Palumbo, Richard A.** *(Dist. 22)*
Session..... 207 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3058
District..... 4004 St. Barnabas Rd.
address..... Suitland 20746-3202
301-423-8300
Member.... 1990 (also 1979-1982, 1986)
since ..... (Senate 1982-83)

▼ **Parham, Samuel M.** *(Dist. 41)*
Session..... 314 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3283
District..... 4811 Liberty Heights Ave.
address..... Baltimore 21207-7193
410-367-7455
Member
since 1989

** Delegate R. Clayton Mitchell has announced his resignation from the Maryland General Assembly, effective January 3, 1994. At press time, his successor had not been named.*

This information is accurate as of press time. Please contact the Department of Legislative Reference, ext. 3810, for current information.

MEMBERS OF THE HOUSE

▼ **Perry, Marsha G.** *(Dist. 33)*
Session..... 214 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3223
District..... 1605 Edgerton Place
address..... Crofton 21114-1504
410-721-7034
Member
since..... 1987

▼ **Petzold, Carol Stoker** *(Dist. 19)*
Session..... 225 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3037
District..... 14113 Chadwick Lane
address..... Rockville 20853-2103
301-871-7413
Member
since..... 1987

▼ **Pinsky, Paul G.** *(Dist. 22)*
Session..... 207 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3058
District..... 6205 Inwood St.
address..... Cheverly 20785-3111
301-772-1287
Member
since..... 1987

▼ **Pitkin, Joan B.** *(Dist. 23)*
Session..... 208 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3098
District..... 12005 Long Ridge Lane
address..... Bowie 20715-2353
301-262-0538
Member
since..... 1979

▼ **Poole, D. Bruce** *(Dist. 3A)*
Session..... 426 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3451
District..... 9743 Beaver Creek
address..... Church Rd.
Hagerstown 21740-1521
301-739-6409
Member
since..... 1987

▼ **Ports, James F., Jr.** *(Dist. 8)*
Session..... 307 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3365
District..... 4546 Fitch Ave.
address..... Baltimore 21236-3912
410-529-8888
Member
since..... 1991

▼ **Preis, Mary Louise** *(Dist. 34)*
Session..... 326 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3289
District..... 9 West Courtland St.
address..... Bel Air 21014-3701
410-838-5890
Member
since..... 1991

▼ **Proctor, James E., Jr.** *(Dist. 27)*
Session..... 206 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3083
District..... 11204 Cedarville Rd.
address..... Brandywine 20613-7690
301-888-9353
Member
since..... 1990

▼ **Rawlings, Howard P.** *(Dist. 40)*
Session..... 131 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3407
District..... 3502 Sequoia Ave.
address..... Baltimore 21215-7211
410-466-4224
Member
since 1979

▼ **Redmer, Alfred W., Jr.** *(Dist. 8)*
Session..... 307 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3365
District..... 4134 East Joppa Rd.
address..... Suite 106
Baltimore 21236
410-529-8888
Member
since 1991

▼ **Roesser, Jean W.** *(Dist. 15)*
Session..... 225 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3037
District..... 10830 Fox Hunt Lane
address..... Potomac 20854-1553
301-299-9046
Member
since 1987

▼ **Rosapepe, James C.** *(Dist. 21)*
Session..... 210 House Office Bldg.
address..... Annapolis 21401-1991
ext. 3114
District..... 1331 H St., N.W.
address..... Suite 300
Washington, DC 20005-4706
202-628-6041
Member
since 1987

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▼ **Rosenberg, Samuel I.** *(Dist. 42)*
Session..... 320 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3297
District .... 6615 Reisterstown Rd.
address .... Suite 301
Baltimore 21215-2603
410-358-2712
Member
since 1983

▼ **Rynd, Richard** *(Dist. 11)*
Session..... 310 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3342
District .... 5A Gwynns Mill Ct.
address .... Owings Mills 21117-3529
410-363-0690
Member
since ..... 1987 (also 1967-1974)

▼ **Sauerbrey, Ellen R.** *(Dist. 10)*
Session..... 312 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3401
District .... 4122 Sweet Air Rd.
address .... Baldwin 21013-9622
410-592-2200
Member
since 1979

Schisler, Kenneth D. (*Dist. 37*)
Session..... 414 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3429
District .... 5 Federal St.
address .... Suite 223
P.O. Box 1936
Easton 21601-1936
410-822-8682
Member
since 1991

▼ **Slade, John Frank, III**
(Dist. 29C)
Session..... 217 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3314
District .... 24 Courthouse Dr.
address .... P.O. Box 288
Leonardtown 20650-0288
301-475-5151
301-994-2930
Member
since 1983

▼ **Smith-Anderson, Elizabeth**
(Dist. 33)
Session..... 215 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3223
District .... 215 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3223
Member
since 1975

▼ **Sophocleus, Theodore J.**
(Dist. 32)
Session..... 214 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3233
District .... Arundel Center North
address .... 101 Crain Highway, N.W.
Suite 510
Glen Burnie 21061-3060
410-761-9963
Member
since 1993

▼ **Sprague, Michael J.** *(Dist. 28A)*
Session..... 216 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3247
District .... P.O. Box 37
address .... Bryans Road 20616-0037
301-375-7995
Member
since 1975

▼ **Stup, J. Anita** *(Dist. 3B)*
Session..... 324 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3240
District .... 153 West Patrick St.
address .... Suite A
Frederick 21701-5513
301-695-0075
Member
since 1991

▼ **Sulin, Victor A.** *(Dist. 32)*
Session..... 214 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3233
District .... Arundel Center North
address .... 101 Crain Highway, N.W.
Suite 510
Glen Burnie 21061-3060
410-461-9963
Member
since 1991

▼ **Taylor, Casper R., Jr.** *(Dist. 2A)*
Session..... 151 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3519
District .... 316 Prince George's St.
address .... Cumberland 21502-3658
301-724-9234
Member
since 1975

▼ **Teitelbaum, Leonard H.**
(Dist. 19)
Session..... 221 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3019
District .... 221 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3019
Member
since 1987

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▼ **Thomas, Virginia M.** *(Dist. 13A)*
Session..... 219 House Office Bldg.
address .... Annapolis 21401-1991
ext. 3205
District .... 6153 Forty Winks Way
address .... Columbia 21045-4313
410-730-0485
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▼ **Thornton, Robert Alan, Jr.** *(Dist. 37)*
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District .... 118 Market St.
address .... Denton 21629-1035
410-479-2570
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District .... 9708 Potomac Dr.
address .... Fort Washington 20744-6935
301-839-7247
Member
since 1991

▼ **Vallario, Joseph F., Jr.** *(Dist. 27)*
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ext. 3488
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address .... Suitland 20746-4394
301-423-8100
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address .... Kensington 20895-2132
301-942-8581
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address .... Baltimore 21230-1503
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▼ **Wood, John F., Jr.** *(Dist. 28B)*
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ext. 3247
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Mechanicsville 20659-3206
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▼ **Workman, Betty** *(Dist. 1B)*
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ext. 3462
District .... 65 La Vale Ct.
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Maryland congressional legislators

During 1994, health system reform will be an important and emotional topic at the federal level, as well as in the Maryland General Assembly. Below are the names, addresses, committee appointments, and phone and fax numbers of Maryland senators and representatives.

▼ **Senator Paul S. Sarbanes** (D)
Hart Senate Office Building-309
United States Senate
Washington, DC 20510
Phone: 202-224-4524
Fax: 202-224-1651
District: 410-962-4436
Committees: Banking, Housing, and Urban Affairs; Budget; Foreign Relations; Joint Economic (vice chairperson); Joint Organization

▼ **Senator Barbara A. Mikulski** (D)
Hart Senate Office Building-709
United States Senate
Washington, DC 20510
Phone: 202-224-4654
Fax: 202-224-8858
District: 410-962-4510
Committees: Appropriations; Labor and Human Resources; Select Ethics

▼ **Representative Wayne Gilchrest** (R-1st)
Cannon House Office Building-412
United States House of Representatives
Washington, DC 20510
Phone: 202-225-5311
Fax: 202-225-0254
District: 410-778-9407
Committees: Merchant Marine and Fisheries; Public Works and Transportation

▼ **Representative Helen Delich Bentley** (R-2nd)
Longworth House Office Building-1610
United States House of Representatives
Washington, DC 20510
Phone: 202-225-3061
Fax: 202-225-4251
District: 410-337-7222
Committees: Appropriations; Merchant Marine and Fisheries

▼ **Representative Benjamin L. Cardin** (D-3rd)
Cannon House Office Building-227
United States House of Representatives
Washington, DC 20510
Phone: 202-225-4016
Fax: 202-225-9219
District: 410-433-8886
Committees: House Administration; Standards of Official Conduct (Ethics); Ways and Means

▼ **Representative Albert Wynn** (D-4th)
Cannon House Office Building-423
United States House of Representatives
Washington, DC 20510
Phone: 202-225-8699
Fax: 202-225-8714
District: 301-350-5055
Committees: Banking, Finance and Urban Affairs; Foreign Affairs; Post Office and Civil Service

▼ **Representative Steny H. Hoyer** (D-5th)
Longworth House Office Building-1705
United States House of Representatives
Washington, DC 20510
Phone: 202-225-4131
Fax: 202-225-4300
District: 301-464-6440
Committees: Appropriations; House Administration

▼ **Representative Roscoe Bartlett** (R-6th)
Cannon House Office Building-312
United States House of Representatives
Washington, DC 20510
Phone: 202-225-2721
Fax: 202-225-2193
District: 301-694-3030
Committees: Armed Services; Science, Space, and Technology

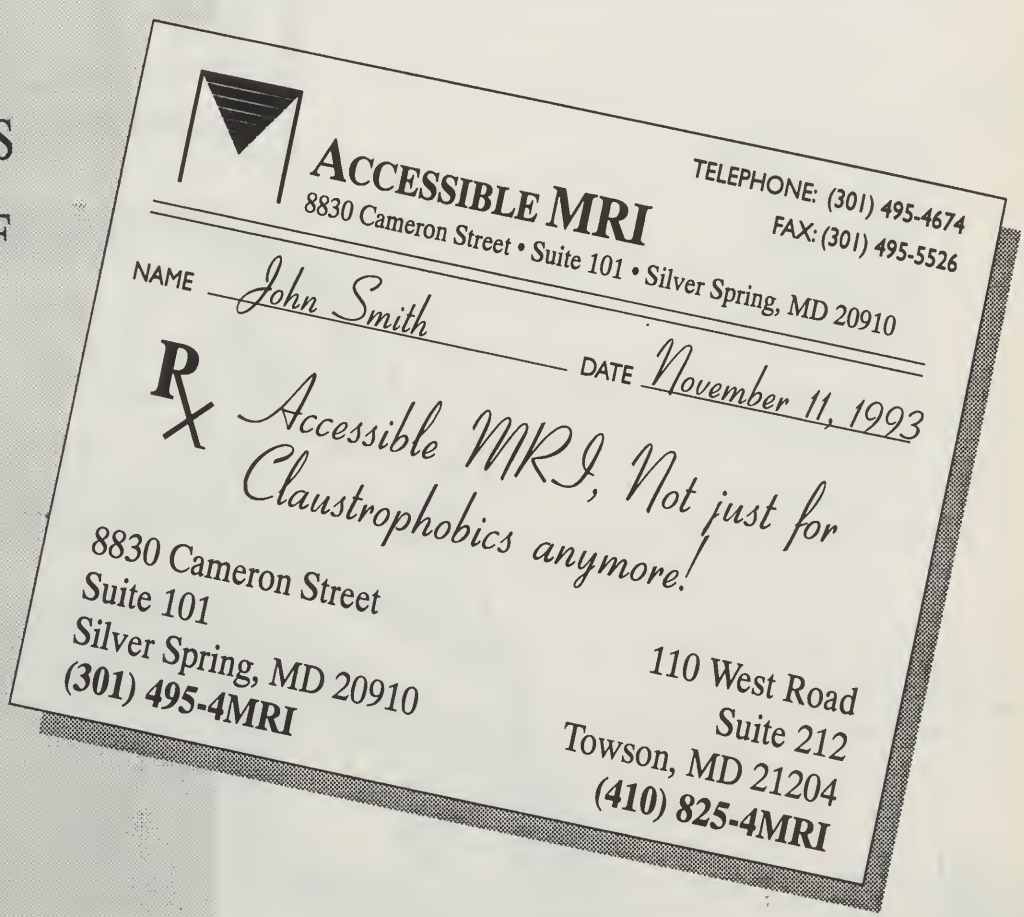
▼ **Representative Kweisi Mfume** (D-7th)
Rayburn House Office Building-2419
United States House of Representatives
Washington, DC 20510
Phone: 202-225-4741
Fax: 202-225-3178
District: 410-367-1900
Committees: Banking, Finance, and Urban Affairs; Small Business; Standards of Official Conduct (Ethics); Joint Economic

▼ **Representative Constance A. Morella (R-8th)**
Cannon House Office Building-223
United States House of Representatives
Washington, DC 20510
Phone: 202-225-5341
Fax: 202-225-1389
District: 301-424-3501
Committees: Post Office and Civil Service; Science, Space and Technology

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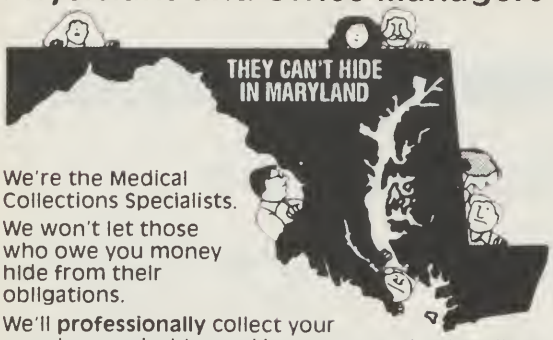
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From the Editor's Desk

David B. Doman, M.D.: Med Chi member runs for Congress

In order to assist Med Chi members in making informed decisions at the polls, especially with regard to health system reform legislation, the *MMJ* is scheduling meetings with various political candidates. On December 1, 1993, Editor Victor R. Hrehorovich, M.D., met with Med Chi member David B. Doman, M.D., of Montgomery County, who is seeking the Democratic nomination for Maryland's Eighth Congressional District. The following is the result of that interview.

Hrehorovich: Tell me about your medical background.

Doman: I received my M.D. in 1976 from Eastern Virginia Medical School in Norfolk, Virginia. I completed my internship and residency at the Yale Internal Medicine Program in Connecticut. I then proceeded with my gastroenterology fellowship at George Washington University School of Medicine, where I continue to serve as an associate clinical professor of medicine. In 1981, I established a successful gastroenterology practice in Montgomery County, subsequently bringing on two partners who are still with me.

Hrehorovich: Have you been involved with local and national medical societies?

Doman: I have been a member of the American Medical Association (AMA) and the American Medical Political Action Committee (AMPAC) for a number of years. I have also been active with my county component society and Med Chi. I served on the editorial board of *Montgomery Medicine*. I also served on the Montgomery County Medical Society Legislative Committee, and only recently resigned as chairperson due to the time demands of my political campaign. On a state level, I served as a Med Chi delegate for the last several years and as a board member of the Maryland Medical Political Action Committee (MMPAC).

Hrehorovich: How did you become interested in politics?

Doman: I've always been interested in politics and social activism. In the 1960s, the popular phrase was "If you're not part of the solution, you're part of the problem." That was something I believed deeply. My interest in civic activism and political activity was temporarily tabled during my medical education and postgraduate work, but I never lost the fire, and I never lost interest in addressing societal issues.

My interest has been reawakened by national health system reform. I feel a responsibility, as a citizen and a physician, to participate in the dialogue and help frame it.

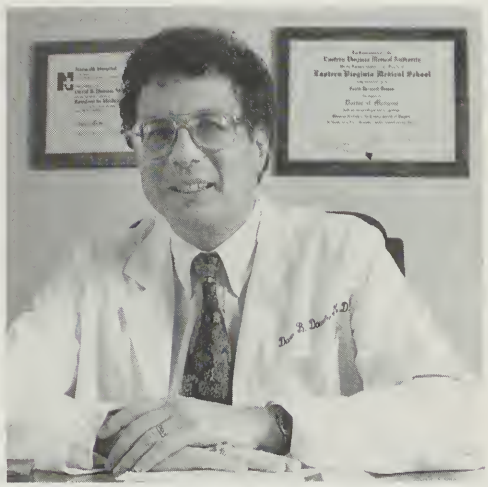


Figure 1. David B. Doman, M.D., in his medical office in Montgomery County.

Hrehorovich: Tell me about the office you are seeking, and why you have chosen to seek that office.

Doman: I am running for representative of the Eighth Congressional District in Montgomery County. I formally filed with the Federal Election Commission last August. I believe it's important to have physician participation in Congress. Currently, only 2 of the 535 members of Congress have a medical background. These two gentlemen are in their sixties and may not be seeking reelection. So, at a time when health system reform has become the nation's number one domestic issue, I believe strongly there should be at least one physician legislator.

Hrehorovich: In addition to health system reform, what other issues do you think are of great importance to the country at this time?

Doman: There are many. Certainly, the development of a policy establishing coordination between the government and the private industrial sector must be addressed. Historically, our society has been based on free market economics and capitalism. This certainly was appropriate when the free market entailed one company competing against another. Unfortunately, what has happened, particularly in the post–war era, is that free market economics, to a certain extent, are no longer valid. The playing field is no longer level when our private industries must compete against international government consortiums. The federal gov-

ernment should serve not as a partner with industry but as a facilitator to create an economic climate for research and development that will allow American industries to compete in the international arena.

Education, particularly when it comes to preserving our future, is another major issue. The data indicate our students are falling behind students in other industrialized nations in science, math, and technology. Ironically, our higher education system is still quite good; foreign students flock to our universities. Once the students have been educated however, they return overseas, and we are left with nothing except their tuition to show for it. American students are not currently pursuing, in large numbers, careers in science and technology. As a result, our nation has become a service-oriented society; much of the hard technology is being developed overseas in Europe and Asia. We need to ensure that our primary and secondary students are being properly educated, and that we have the educational infrastructure to provide for competitive American industries well into the 21st century.

Hrehorovich: Do you think it's possible that a single individual such as yourself could influence the course of health system reform?

Doman: If elected to Congress, I would view my role as far more significant than that of only one vote or of being a solitary junior member of Congress. As a physician, and certainly as a Democrat, I know I would be welcomed by a Democratic President and Congress. I believe I would be allowed to participate actively in all dialogue, and, I hope, provide suggestions and constructive criticism.

It is clear that the President and Congress have good intentions in trying to reform the health system, but, to a certain extent, they are presenting their legislative initiatives in a vacuum. As a welcomed member at the negotiating table, I could present the concerns and interests of physicians in private practice and, by extension, the concerns of patients.

Hrehorovich: What are your views on a national health care system? How would you construct it?

Doman: I'm very concerned about the way things are sorting out on Capitol Hill. Basically, two choices are evolving: (1) so-called managed competition and (2) the single-payer system. Our profession and certainly our patients must do everything possible to make sure the managed competition model works. If it doesn't, it will create a tremendous momentum to allow proponents of the single-payer government-run system to take over health care in this country.

Having reviewed health care systems in many industrialized nations—Canada, Britain, France, Italy, Germany—I am impressed that after all these years of social experimentation, these nations are belatedly discovering that there is a role for private insurance. This is ironic given the voices in this country calling for us to fall in line with these industrialized nations and to develop a single-payer government-run system.

I believe government has a responsibility to make sure all citizens have access to health care, but the government does not have the scientific background to implement that health care. This is where the medical community and people experienced in health care delivery systems should come into play. The government should step back and allow people with the experience, the knowledge, and the ethics, I might add, to provide health care for US citizens.

I am concerned with the aggressive government posture on health system reform. It could potentially compromise the sanctity of the doctor/patient relationship. One reason I am running for Congress is that I believe in order to practice medicine in the 1990s, doctors must be prepared to not only observe the Hippocratic oath but defend it as well. Whereas historically, doctors were not involved in politics, I believe we need to revise our vision of practicing medicine to encompass political activities. If we don't defend the Hippocratic oath, if we don't defend the sanctity of the doctor/patient relationship, no one else will.

Hrehorovich: The federal government thinks it needs to control health care costs because they are skyrocketing out of control in all realms—the pharmaceutical, the hospital, and the private physician. What do you think can be done to control this?

Doman: Viewing rising health care costs as reflecting doctor fees, hospital fees, and pharmaceutical fees is a simplistic and naive view of the problem. There is no question that health care costs are escalating at an unacceptable rate. A careful review will reveal that these escalating costs reflect American society—a society that is growing in population, and a population that is aging. Ironically, this is partly the result of the medical marvels and miracles provided to society by our profession. To some extent, we are being held accountable for the benefits we provide.

But the problem is much more than just a growing and aging population. Escalating health care costs, to a great extent, are caused by factors that could be eliminated or reduced—for example, smoking, alcohol abuse, and violence. Not many people realize that the leading cause of death among African-American teenage males in our society is gunshot wounds. Therefore, any comprehensive health system reform package must address safety in our communities. If law enforcement officials can restore safety

in our streets and reduce the number of individuals with knife and gunshot wounds who cascade into emergency rooms every day, there would be a dramatic and immediate reduction in the cost of health care in this country.

Finally, society is going to have to adjust its health care expectations. Some citizens think we should do everything for everyone—that there are bottomless pockets. Our society must make some difficult ethical decisions in which the medical community should participate. For example, society may have to reevaluate its position on providing health care, for the patient with a terminal illness or the patient who has been an alcoholic and is requesting a liver transplant. Perhaps in such extreme examples, we should emphasize the relief of pain and suffering rather than the cure. Instead of spending $250,000 to provide a liver transplant for an alcoholic, perhaps society would be better served by using the money to vaccinate thousands of poor babies. Realizing funds are limited, we have to adjust societal expectations and prioritize our health care decisions.

Hrehorovich: How soon do you think the country, under the leadership of the federal government, can effectuate societal changes to reduce smoking, drinking, and violence? Is this extensive change in behavior something that can be done in a short period of time?

Doman: Some things can be addressed in the short term, while others will have to be addressed in the long term. I strongly support a sin tax (i.e., the taxing of alcohol, specifically hard liquor, and tobacco). These taxes provide increased revenue in the short term, and are a means of behavior modification in the long term. If it is more expensive to engage in certain behaviors, such as cigarette smoking, individuals may cut back on smoking simply because they can't afford it. In the long term, that translates to reduced health care costs.

As for violence, the recent crime bill passed by Congress is a good start. Society and our leadership must realize that to reduce health care costs, there must be safety in our streets. Any comprehensive health system reform plan should include means to increase the presence of police in our communities, to increase the number of prisons, if necessary, and to decrease the number of knifings and gunshot wounds.

Hrehorovich: What do you believe the medical community can do to help at the national level and, specifically, in your own campaign for national office?

Doman: It's important that the physician community awaken from its political slumber and participate in the process; if it doesn't, change will proceed without physician input. We have a responsibility to actively participate as patient advocates. Legislators, given that they have no medical background, will do what they are trained to do, which is look at charts, graphs, and numbers and focus strictly on the bottom line without appreciating how it translates into real people and real patient care. Unfortunately, once the health system reform initiative is passed, legislators will turn to doctors and say, "Here you go. Now go practice medicine under these guidelines." It will be much easier if physicians help craft the legislation rather than react after it has been passed.

As for what can be done to assist me, there are already hundreds of physicians who have volunteered and contributed to my campaign. The health care issues I am advocating are not specific to physicians in Montgomery County; they are applicable to physicians throughout Maryland. These are bipartisan, not Republican or Democratic, issues. Therefore, I am seeking broad-based support from the physician community throughout Maryland. It is important that physicians participate in the political process on behalf of the medical profession and, by extension, the patients they have taken an oath to serve.

Hrehorovich: Do you see problems in the health care system that physicians could help correct—on the hospital level, the pharmaceutical level, or the individual physician practice level?

Doman: We have a responsibility to improve regulations in the physician community. But, regulation should come from within our profession not from an outside bureaucratic agency. I say this because governmental agencies often view issues out of context. Efforts to improve regulation have already been made at the state and national level, and they should continue. All regulation should be done on a peer level within the physician community.

Hrehorovich: What is your view on health care industries—hospitals and insurance companies—that obtain benefits from society by having a tax-exempt or nonprofit status? What do you think their responsibility is versus the responsibility of the for-profit entities?

Doman: Those that have favored status as tax-exempt entities have a legal and ethical responsibility to adhere to the letter of the law. Those entities that deviate from the law by making for-profit or inappropriate investments need to be closely regulated.

I was troubled, as was most of the public, about the recent revelations regarding Blue Cross and Blue Shield of Maryland, and Blue Cross and Blue Shield of the National Capital Area, in terms of their non–health care investments and their expenditures on entertainment—whether it was a sky box at Camden Yards or a trip to the Winter Olympics for dozens of executives and their significant others. These

costs were passed on to policyholders under the guise of the rising cost of health care. In turn, people got the impression that the costs were doctor fees.

As an elected congressman, I would work for greater regulation of the insurance industry. I still strongly believe that private insurance is the best way to provide health care, but the medical profession and the government must make sure that these industries are regulated and that expenditures are keyed directly to health care costs and are not used for extraneous business ventures or entertainment expenses.

Hrehorovich: What are your thoughts about the salaries being paid to the chief executive officers (CEOs) of the insurance companies?

Doman: I was shocked and dismayed about some recent congressional revelations regarding benefit packages received by insurance company CEOs. At a time when insurance companies are publicly preaching health care cost containment, I think it is inappropriate that their CEOs are receiving high six-figure or even seven-figure benefit packages. It seems to be a possible conflict of interest when an insurance company is able to potentially increase premiums, reduce physician compensation, reduce services provided for patients, and increase bottom-line profits. In some cases, these profits are translated into executive bonuses for insurance company executive officers. As a member of Congress, it would be my hope to improve regulation of insurance companies to make sure that they do not receive windfall profits and unreasonably high benefit packages at a time when the overriding concern is health system reform.

Hrehorovich: Do you believe that nonprofit hospitals should be similarly regulated to maintain their commitment to patient care?

Doman: I think there is a greater need to make sure they are regulated appropriately. If they receive favored status, they should not be allowed to use monies that are indirectly provided through public funding on for-profit ventures.

Hrehorovich: You are a Democrat. How do you respond to being in a party that is frequently accused of being the tax-and-spend party?

Doman: I wince when I hear that term. I believe there are two ways to raise funds to balance the budget. The one to which I am very much opposed—not only philosophically but personally as a tax-paying citizen—is raising income taxes.

I believe the way to increase revenue is by developing a policy establishing coordination between government and private industry that will allow for economic development and job growth, thereby reducing unemployment. By reducing unemployment, we can increase revenue by broadening the tax base. This will also reduce expenditures by removing people from social subsidies.

I also believe the Democratic party is coming to realize that social subsidies will have to be looked at closely as we try to balance the budget. I believe, in retrospect, that the War on Poverty in the 1960s was a well-intended social intervention that failed. It failed because social subsidy recipients had no way to escape the vicious cycle in which they found themselves.

We should take the hard-learned lessons of the 1960s and apply them to the 1990s. We need to make sure that social subsidies are not viewed as a way of life, but rather as a second chance—a safety net provided by the government for people having a difficult time. Recipients need to understand that it is a two-way contract with mutual responsibilities. While receiving subsidies, which I believe should be limited to a two-year period, recipients should be required to seek employment or attend a job retraining program to receive the skills they need to acquire employment. If the recipients are parents, I would advocate that their children attend school at least 90% of the time and receive all required vaccinations. This way, we can encourage social subsidy recipients to be good parents. In the long term, if their children are required to attend school 90% of the time, data indicate that these educated children will be less likely to get involved in crime and are, therefore, more likely to seek gainful employment in the future. If we can do that within one generation, we can break the vicious cycle of social subsidies in our nation.

Hrehorovich: What about those individuals who have looked for jobs and can't find them, who have sincerely made an effort to obtain employment, and have even engaged in retraining? Because of our changing economy, and because many entry-level jobs and less skilled jobs are going to labor markets abroad, what would you tell individuals who say,"I've looked for two years. I can't find a job."

Doman: That, unfortunately, is a reflection of changing international economics. What that means is that the government has a responsibility to develop an industrial policy establishing coordination between government and private industry. The result would be the ability to project where the job growth will be in the coming decade, anticipate the needs, and educate the work force to be prepared for these changes. For people who cannot find work, the government could provide temporary work programs. (For example, in the 1930s, President Roosevelt had public work projects designed to get people off the welfare rolls and back to work.) Once people are on their

feet and can continue their job education programs, they may be able to break the vicious cycle and find gainful employment.

There is a lot in our nation's infrastructure that needs to be looked at, whether it is our educational system, our rail system (which is terribly behind the times), or our highway system. We can't just respond to economic conditions in the 1990s, but must try to define them in the international arena. One reason our nation flourished early in this century was that we created new markets and new industries—aerospace, computers, electronics, automotives. The challenge for our nation in the 21st century will be to establish innovative new markets and industries, thus creating additional jobs for our citizens.

Hrehorovich: Some people say that government regulations interfere with productivity and economic growth. Businesses certainly complain about a lot of regulations. Of all professions, medicine seems to be the most regulated. What are your views on government regulation?

Doman: The trouble with government regulation in 1993 is that it impairs economic development and, by extension, job growth. We need to create a coordinated government/private-industry industrial policy for short and long-term economic development. We need to change the relationship between government and private industry from a punitive regulatory one to one in which government turns to private industry and says, "What can we do to facilitate economic research and development, open up new types of industries, open up new markets and, therefore, sustain job growth in our nation?" We need productive dialogue between government and industry so that our government can create an environment in which new industries for the 21st century can be developed.

Similarly, medical regulation needs to be redefined. I believe the government does have a responsibility to make sure all citizens have access to quality health care, and it has the responsibility to make sure benefits are provided. But, how to go about delivering health care and providing benefits should be decided by the entities and individuals qualified to do that—private insurance companies and physicians. The government should regulate insurance companies but should not try to deliver health care. Similarly, the government should ask the physician community what can be done to reduce bureaucracy and the hassle factor and get physicians away from paper work and back to the bedside where they belong in order to provide high quality health care for patients.

Hrehorovich: What are your thoughts about attempts to place fee caps on physician services?

Doman: I believe anyone who tries to place caps on physician fees does not have a grasp of what is causing health care costs to increase. Indeed, recent attempts to establish "physician fee schedules" demonstrated that health care costs will continue to climb. A vivid example of this is Medicare; most physicians participate in this program, which has a health care fee schedule. Yet, Medicare costs continue to escalate rapidly.

Rather than placing limits on physician fees, the emphasis of health system reform should be to determine the root causes of the increasing health care costs. Refocused attention should be paid to a population that is growing in size and is aging; the public's expectations for unlimited testing and therapy, regardless of the potential outcome; and, of course, the societal health care consequences of smoking, alcohol abuse, drug abuse, and violence. Rather than limiting physician fees, attempts should be made to eliminate the need for some of these health care services which, in turn, would lead to an immediate and dramatic reduction in the cost of health care.

Hrehorovich: How have you prepared yourself for political office, and have you had any experience with governmental agencies on health care issues?

Doman: I have been active with the Democratic party on a national and county level for a number of years. During the last election cycle, I was a key advisor to Congressman Albert Wynn, who was successfully elected to Maryland's 4th Congressional District in Prince George's County. I specifically advised Congressman Wynn on health care issues. In addition, Neal Potter, the Montgomery County chief executive, appointed me to the Montgomery County Commission on Aging last year. In this capacity, I have become particularly concerned about health care and other societal issues facing our senior citizen population.

Hrehorovich: How have you prepared for your campaign?

Doman: In the past year, I attended an intensive one-week campaign-management school where I put in 16- to 18-hour days. I have also retained the highly regarded Campaign Design Group to coordinate my campaign. Having attended extensive didactic lectures and having met with dozens of political consultants, I now have the contacts and knowledge to run a sophisticated and competitive political campaign.

Hrehorovich: What sort of support and endorsement have you received so far?

Doman: I'm very proud that in just a few months I have received support from the Maryland Medical Political Action Committee (MMPAC) and the District of Columbia

Political Action Committee. I have also received endorsements from the Board of Directors of the Montgomery County Medical Society and the Board of Directors of the Prince George's County Medical Society. It is very important to my campaign that I receive broad-based bipartisan physician support because the issues for which I am advocating are relevant to physicians throughout Maryland.

Hrehorovich: How do you view your chances of being elected?

Doman: Anytime you face off against an incumbent, it's a great challenge. Nonetheless, the public should respond positively to a nonpolitician with a medical background at a time when health system reform is becoming the nation's number one domestic issue. In addition, the district in which I am running, Montgomery County, is 54% Democratic, 35% Republican, and 11% independent; therefore, to win the Democratic nomination with such a heavily Democratic constituency has great value. I think I have a very good chance. To take a page from the Bible, I think this David will do very well against the governmental Goliath.

Hrehorovich: You have been endorsed by several physician groups. Have you been endorsed by any nonphysician groups?

Doman: I have already had extensive meetings with the leadership of the Montgomery County Democratic Party. They are not only aware of what I'm doing, but very supportive. I have also initiated meetings with members of organized labor, educational groups, and private industry. These groups are also supportive of the ideas I would be bringing to the legislative arena.

Hrehorovich: What is the likelihood that you will be the Democratic nominee?

Doman: Very good. At this point, I am unopposed for the nomination, and there is no one even remotely on the horizon. The Democratic leadership, precinct officials, and elected officials are rapidly joining to support me. The Democratic primary is in September 1994. As things stand now, God willing, I will win the nomination. I would then run in the general election in November 1994.

Hrehorovich: How will your campaign and possible election affect your practice and your family?

Doman: I have been married for 18 years and have a wonderful wife, Peggy, and three beautiful children, Mark (age 15), Sandy (age 12), and Melissa (age 8). Prior to announcing my candidacy, I had an extensive heart-to-heart talk with my family. They were understanding and shared in my desire to make a meaningful contribution to society on issues of health care, education, and our nation's future economic development. If elected, there will be intrusions on my personal life; however, these will be no different than those experienced by most physicians and their families each and every day.

As for my practice, I am blessed with two terrific partners who are very supportive of what I am doing. Though we would hate to part professionally, they understand I have a greater responsibility to our patients and our nation Nonetheless, I would always consider myself a physician and would view everything from the view of a practicing physician; that is the essence of what I am. I would continue to serve as a physician through part-time clinical and teaching activities.

Hrehorovich: How can someone reach you to discuss issues or concerns?

Doman: People can write to Doman for Congress, Campaign Headquarters, 3720 Farragut Avenue, 4th Floor, Kensington, MD 20895, or call 301-949-955 or 800-VOTE-DBD. ■ *VS*

Upcoming issues of the *MMJ* will feature other candidates for political office. Inclusion of interviews with political candidates does not necessarily indicate support or endorsement. Any candidate wishing to be considered for an interview by the *MMJ* should contact the journal office at 410-539-0872 or 800-492-1056.

MARYLAND RESIDENTS:
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Your earnings can be higher with tax-frees

Annual income on an investment of $20,000 if you're in the 36% federal tax bracket, or 41.8% bracket including state and local taxes

	What you earn		What you pay in federal, state, and local taxes		What you keep
Typical long-term bond fund					
Taxable fund	$1,040	–	$435	=	**$605**
Tax-free fund	$886	–	$0	=	**$886**
Typical short-term bond fund					
Taxable fund	$872	–	$364	=	**$508**
Tax-free fund	$688	–	$0	=	**$688**

While earnings from typical taxable investments initially appear to be higher, taxes can subtract a lot. With triple-tax-frees, you keep it all.*

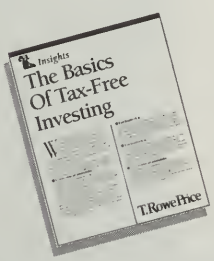
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Our free report can help you make an informed decision. *The Basics Of Tax-Free Investing* can help you develop a tax-free strategy to meet your investment goals. Each Fund has a $2,500 minimum, offers free checkwriting, and has **no sales charges.**



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*Some income may be subject to state and local taxes and the federal alternative minimum tax. Chart is for illustrative purposes only and does not represent an investment in any T. Rowe Price fund. The information in this example was derived from average yields of corporate and municipal bond funds as of 8/31/93, according to Lipper Analytical Services. Present expense limitation will increase Maryland Short-Term Tax-Free Bond Fund's yield and total return. Request a prospectus with more complete information, including management fees and other charges and expenses. Read it carefully before you invest or send money. T. Rowe Price Investment Services, Inc., Distributor.

COMING OUT OF THE DARK

Med Chi's Physician Rehabilitation Committee deals with the substance abuse and mental health problems of Maryland physicians, with a confidential and nondisciplinary focus...Addiction, Marital/Family Conflicts, Psychiatric Illness, Organic Impairment, Physical Handicap...If these problems exist, we can help find the solution. Call us.

The Physician Rehabilitation Committee of Med Chi is available to all Maryland physicians, and their families. The Committee is NONDISCIPLINARY and information is kept CONFIDENTIAL. If you, a colleague, or family member is in need of our services call (410)962-5580 or call toll free (800)992-7010, or leave a message 24 hours a day, 7 days a week at (410)727-1020.

HELPING IS OUR BUSINESS...All donations to the Physician Rehabilitation Committee are used for the delivery of services to Maryland physicians in need of help. If you wish to help further the work of the Committee through a tax deductible donation send your check to: The Medical and Chirurgical Faculty Charitable/Educational Foundation, 1204 Maryland Avenue, Baltimore, Maryland 21201 Please note on your donation: "Physician Rehab"

Medical and Chirurgical Faculty of Maryland

Physician Rehabilitation Committee

Durable medical equipment

Effective January 1, 1994, durable medical equipment (DME) claims must be forwarded to AdminaStar Federal, Inc. For information, call

- Provider Education, 317-841-4486
- Customer Service, 800-346-2233
- EMC Customer Service, 800-237-6318
- EMC Enrollment Information, 800-952-2068
- Telephone Appeals, 317-841-1307

Physicians may also write to

AdminaStar Federal, Inc.
PO Box 7078
Indianapolis, IN 46207-7078

The 11 new forms for DME supplies follow this article: (1) hospital beds/support surfaces, (2) manual/motorized wheelchairs, (3) respiratory equipment, (4) orthotics/lymphedema pumps/osteogenesis stimulators/therapeutic shoes, (5) surgical dressings/urological supplies, (6) TENS (transcutaneous electrical nerve stimulation), (7) seat-lift mechanisms/power-operated vehicles, (8) immunosuppressive drugs, (9) infusion pumps/home glucose monitors, (10) parental or enteral nutrition, and (11) home oxygen therapy.

AdminaStar Federal supplied the following questions and answers about DME usage.

▲What is a physician's responsibility when prescribing DME?

Regulations specify that DME must serve a medically therapeutic benefit to be reimbursed. The physician's prescription is the primary source of this information. The physician is responsible for supplying a complete, detailed, and accurate description of the patient's condition.

Section 4152 of OBRA '90 (Omnibus Budget Reconciliation Act) prohibits suppliers from distributing to physicians or beneficiaries any completed or partially completed Medicare-required forms or other documents showing that a covered item is medically necessary. Any supplier of covered DME or related supplies who knowingly and willfully violates this provision is subject to a civil monetary penalty not to exceed $1,000 for each such form or document completed and distributed.

Claims for DME home use and related supplies can be paid only if the items meet the Medicare definition of covered DME and are found to be medically necessary. The determination of medical necessity is made using documentation written by the beneficiary's physician.

▲What are physician requirements for completing a certificate of medical necessity (CMN)?

The physician is responsible for completing the medical documentation supporting the DME claim. Physician completion of the required medical documentation assures that the furnished DME items are specifically needed for the beneficiary's unique medical condition. Documentation may consist of medical records, plans of care, discharge plans, prescriptions, or forms explicitly designed to document medical necessity. Regardless of the format, the physician's documentation must establish that the DME is medically necessary for that particular patient and that coverage criteria are met. In addition, the documentation must

- be signed by the physician in his/her own hand and be dated;
- include the diagnosis (ICD-9) or condition that is necessitating the item;
- include a realistic estimate of the length of time the equipment will be needed;
- include the physician's name, UPIN (unique physician identification number), address, and telephone number; and
- provide substantiating medical information communicating the need for DME. This can include the patient's general condition, a clinical assessment of the factors that the physician believes support the DME items being ordered, or a treatment plan for the specific condition requiring the item.

The DME supplier may (1) complete only the administrative portions of the form or other comparable documentation (the beneficiary's name; address; HICN [health insurance claim number]; the supplier's identifying information; and the physician's name, address, and telephone number) or (2) enclose a cover letter to the physician giving a description of the patient's need and a complete narrative description of the specific equipment contemplated (the actual charge should be included as part of, or in addition to, the narrative description).

Physicians may not charge suppliers or beneficiaries for completing DME certification and recertification forms. The Office of Investigations considers the soliciting of such fees as a potential felony. Allegations against physicians charging suppliers or beneficiaries for completing CMNs should be reported to

DMERC Fraud and Abuse Unit
PO Box 6128
Indianapolis, IN 46206-6128

▲ Audit of CMNs, prior authorization, and prescription requirements

The DMERC (DME Regional Carrier) Fraud and Abuse Unit will be conducting random audits of all CMNs submitted to the DMERC (approved and denied CMNs, both electronic media claims (EMC) and hard copies). The audits' purpose is to ensure that there are hard copy CMNs to support electronically submitted CMNs and to determine whether

- a supplier completed any part of the medical necessity justification before or after the physician completed the justification;
- the recipient of the equipment or supplies was charged and paid a deductible and copayment;
- the recipient initiated the request for the item(s) or was approached by the supplier;
- the diagnosis and other statements in the CMN or prior authorization are consistent with the medical records;
- the equipment or supplies billed were actually received by the beneficiaries; and,
- the items were received as billed.

To determine the medical necessity of the items billed, the DMERC Fraud and Abuse Unit will be requesting medical records from the prescribing physician. Upon receipt of a request for documentation, the prescribing physician should forward to the DMERC Fraud and Abuse Unit the required medical documentation assuring that the DME items furnished to a beneficiary are those specifically needed for the beneficiary's medical condition (e.g., medical records, plans of care, discharge plans, prescriptions, or forms explicitly designed to facilitate the documentation of medical necessity). A completed CMN copy, by itself, would not provide sufficient documentation of medical necessity. ■

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Effective 10/93 **DURABLE MEDICAL EQUIPMENT REGIONAL CARRIER** DMERC 01.01

CERTIFICATE OF MEDICAL NECESSITY: HOSPITAL BEDS/SUPPORT SURFACES

SECTION A **CERTIFICATION:** ☐ INITIAL ☐ REVISED

PATIENT NAME, ADDRESS, TELEPHONE AND HIC NO.	SUPPLIER NAME, ADDRESS, TELEPHONE, AND NSC NUMBER
(___) ___-____ HICN_____	(___) ___-____ NSC _____
PLACE OF SERVICE ____ REPLACEMENT ITEM ____	HCPCS CODE(S) WARRANTY LENGTH TYPE
NAME AND ADDRESS OF FACILITY IF APPLICABLE (SEE BACK OF FORM):	_____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____

SECTION B **INFORMATION BELOW TO BE COMPLETED ONLY BY THE PHYSICIAN OR PHYSICIAN'S EMPLOYEE**

DIAGNOSIS (ICD9): _____ _____ _____ _____	DOB ____/____/____
I LAST EXAMINED THIS PATIENT FOR THIS CONDITION ON: _____/_____/_____ PT. SEX ____ (M OR F)	DATE NEEDED INITIAL ____/____/____ REVISED ____/____/____ EST. LENGTH OF NEED: # OF MONTHS: ____ 1-99 (99 = LIFETIME)

ANSWER QUESTIONS 1-7 FOR HOSPITAL BEDS, 12-13 AND 21 FOR ALTERNATING PRESSURE PADS OR MATTRESSES, 13-22 FOR AIR-FLUIDIZED BEDS Use Y - Yes, N - No, or D for Does Not Apply unless otherwise noted.

[ ] 1. Does the patient require positioning of the body in ways not feasible with an ordinary bed due to a medical condition which is expected to last at least one month?

2. Reserved for future use.

[ ] 3. Does the patient require, for the alleviation of pain, positioning of the body in ways not feasible with an ordinary bed?

[ ] 4. Does the patient require the head of the bed to be elevated more than 30 degrees most of the time due to congestive heart failure, chronic pulmonary disease, or aspiration?

[ ] 5. Does the patient require traction which can only be attached to a hospital bed?

[ ] 6. Does the patient require a bed height different than a fixed height hospital bed to permit transfers to chair, wheelchair, or standing position?

[ ] 7. Does the patient require frequent changes in body position and/or have an immediate need for a change in body position?

8. Reserved for future use.

9. Reserved for future use.

10. Reserved for future use.

11. Reserved for future use.

[ ] 12. Is the patient highly susceptible to decubitus ulcers?

[ ] 13. Are you supervising the use of the device?

[ ] 14. Does the patient have coexisting pulmonary disease?

[ ] 15. Has a conservative treatment program been tried without success?

[ ] 16. Was a comprehensive assessment performed after failure of conservative treatment?

[ ] 17. Is the home electric system sufficient for the anticipated increase in energy consumption?

[ ] 18. Is structural support adequate to support the air-fluidized bed?

[ ] 19. Are open, moist dressings used for the treatment of the patient?

[ ] 20. Is there a trained fulltime caregiver to assist the patient and manage all aspects involved with the use of the bed?

21. Provide the stage and size of each pressure area/ulcer necessitating the use of the overlay, mattress or bed.

Pressure area/Ulcer	#1	#2	#3
Stage:	____	____	____
Max Length (cm):	____	____	____
Max Width (cm):	____	____	____

___ 22. Over the past month, the patient's ulcer(s) has/have:

1) improved 2) remained the same 3) worsened

I certify the medical necessity of these items for this patient. Section B of this form and any statement on my letterhead attached hereto has been completed by me, or by my employee and reviewed by me. The foregoing information is true, accurate, and complete, and I understand that any falsification, omission, or concealment of material fact may subject me to civil or criminal liability.

PHYSICIAN NAME, ADDRESS	_____ __/__/__ PHYSICIAN'S SIGNATURE: DATE (A STAMPED SIGNATURE IS NOT ACCEPTABLE) ☐ Attending ☐ Consulting ☐ Other ordering UPIN:_____ TELEPHONE #: (___) ____-____

08/16/93

SECTION A: (To be completed by the supplier)

CERTIFICATION TYPE:	Check the appropriate box to indicate if this CMN is the initial certification for this patient or if this is a revised certification.
BENEFICIARY INFORMATION:	Indicate the beneficiary's name, permanent legal address, telephone number and his/her health insurance claim number (HICN) as it appears on the beneficiary's Medicare card and on your claim form.
PLACE OF SERVICE:	Indicate the place in which the item is being used, i.e., patient's home is 12, skilled nursing facility (SNF) is 31, End Stage Renal Disease (ESRD) facility is 65, etc. Refer to your supplier manual for a complete index.
REPLACEMENT:	If the item billed is a replacement for a previously purchased item, place a check mark in the blank.
FACILITY NAME:	If the place of service is a facility, indicate the name and complete address of the facility.
SUPPLIER INFORMATION:	Indicate the name of your company (supplier name), address and telephone number along with the Medicare Supplier Number assigned to you by the National Supplier Clearinghouse (NSC).
HCPCS CODES:	List all procedure codes for items ordered that require a CMN. Procedure codes that do not require a certification should not be listed on the CMN. If the item ordered is purchased equipment, indicate whether the equipment is covered by a warranty. "Y" denotes that there is a warranty and "N" indicates there is no warranty. If it is covered by a warranty, the length and type of warranty must be indicated.

SECTION B: (To be completed by the physician or physician's employee)

DIAGNOSIS:	In the first space, list the ICD9 code that represents the primary reason for ordering this item. List any additional ICD9 codes that would further describe the medical need for the item (up to 3).
EXAMINATION DATE:	Indicate the date (MM/DD/YY) the patient was last seen by the ordering physician prior to the beginning of this certification period.
DOB:	Indicate patient's date of birth (MM/DD/YY).
DATE NEEDED:	Indicate the date (MM/DD/YY) the ordered item was initially needed outside the hospital setting. If this certification is a revised certification, also indicate the effective date of the order change.
EST. LENGTH OF NEED:	Indicate the estimated length of need (the length of time the physician expects the patient to require use of the ordered item) by filling in the appropriate number of months. If the physician expects that the patient will require the item for the duration of his/her life, then enter 99.
QUESTION SECTION:	This section is used to gather clinical information to determine medical necessity. Answer each question within the category of the items ordered, using "Y" for yes, "N" for no, and "D" for does not apply, unless otherwise noted.
PHYSICIAN INFORMATION:	The physician's signature certifies that the item ordered is medically necessary for this patient and that section B was completed or reviewed by the physician. This form must be signed and dated by the physician. Signature and date stamps are not acceptable. The physician must indicate whether he/she is the attending, consulting or other ordering physician by putting a check mark in the appropriate box. Indicate other ordering when you are neither the attending or consulting physician. Refer to your supplier manual for more information.
PHYSICIAN NAME, ADDRESS:	Indicate physician's name and complete mailing address.
UPIN:	The physician must indicate his/her Unique Physician Identification Number (UPIN).
PHYSICIAN'S TELEPHONE NO:	The physician must give a telephone number where he/she can be contacted (preferably a number where records would be accessible pertaining to this patient) if more information is needed.

Effective 10/93 **DURABLE MEDICAL EQUIPMENT REGIONAL CARRIER** DMERC 02.01

CERTIFICATE OF MEDICAL NECESSITY: MANUAL/MOTORIZED WHEELCHAIRS

SECTION A CERTIFICATION: ☐ INITIAL ☐ REVISED

PATIENT NAME, ADDRESS, TELEPHONE AND HIC NO.

(_ _ _) _ _ _ - _ _ _ _ HICN_____

SUPPLIER NAME, ADDRESS, TELEPHONE, AND NSC NUMBER

(_ _ _) _ _ _ - _ _ _ _ NSC _____

PLACE OF SERVICE _____ REPLACEMENT ITEM _____

NAME AND ADDRESS OF FACILITY IF APPLICABLE (SEE BACK OF FORM):

HCPCS CODE(S)	WARRANTY	LENGTH	TYPE

SECTION B **INFORMATION BELOW TO BE COMPLETED ONLY BY THE PHYSICIAN OR PHYSICIAN'S EMPLOYEE**

DIAGNOSIS (ICD9): _____ _____ _____ _____

PT. HT. _____ (IN.) PT. WT. _____ (LBS) DOB ____/____/____

I LAST EXAMINED THIS PATIENT FOR THIS CONDITION ON: _____/_____/_____ PT. SEX _____ (M OR F)

DATE NEEDED INITIAL ____/____/____ REVISED ____/____/____
EST. LENGTH OF NEED: # OF MONTHS: ____ 1-99 (99 = LIFETIME)

ANSWER QUESTIONS 1-4 FOR MOTORIZED WHEELCHAIR BASE, 4, 18-22 FOR MANUAL WHEELCHAIR BASE, 4-18 FOR WHEELCHAIR OPTIONS.
Use Y - Yes, N - No, or D for Does Not Apply unless otherwise noted.

[ ] 1. Does the patient have severe weakness of the upper extremities due to a neurologic or muscular disease/condition?

[ ] 2. Is the patient unable to operate a wheelchair manually?

[ ] 3. Is the patient capable of safely operating the controls of a power wheelchair?

[ ] 4. Would the patient be bed or chair confined without the use of a wheelchair?

[ ] 5. Does patient have quadriplegia?

[ ] 6. Does patient have a fixed hip angle?

[ ] 7. Does patient have a trunk cast or brace that requires a reclining back feature for positioning?

[ ] 8. Does the patient have a cast or brace which prevents 90 degree flexion of the knee?

[ ] 9. Does patient have a musculoskeletal condition that prevents 90 degree flexion at the knee?

[ ] 10. Does patient have excessive extensor tone of the trunk muscles?

[ ] 11. Does patient have weak neck muscles requiring support?

[ ] 12. Does patient have weak upper body muscles, upper body instability or muscle spasticity?

[ ] 13. Does patient have use of only one hand/arm and the condition is expected to last for 6 months or more?

[ ] 14. Is there hemiplegia or uncontrolled arm movements?

[ ] 15. Does patient have a need for arm height different than that available using non-adjustable arms?

[ ] 16. Does the patient need to rest in a recumbent position two or more times during the day?

[ ] 17. Is transfer between bed and wheelchair very difficult?

____ 18. How many hours per day does the patient usually spend in the wheelchair? (round up to next hour, e.g., for 3 1/2 hours, use 4) use 1-24.

[ ] 19. Is the patient able to place his/her feet on the ground for propulsion in a standard wheelchair?

[ ] 20. Is the patient able to self-propel in a standard wheelchair?

[ ] 21. Reserved for future use.

[ ] 22. Can/does patient self-propel in a lightweight wheelchair?

I certify the medical necessity of these items for this patient. Section B of this form and any statement on my letterhead attached hereto has been completed by me, or by my employee and reviewed by me. The foregoing information is true, accurate, and complete, and I understand that any falsification, omission, or concealment of material fact may subject me to civil or criminal liability.

PHYSICIAN NAME, ADDRESS

_____ __/__/__
PHYSICIAN'S SIGNATURE: DATE
(A STAMPED SIGNATURE IS NOT ACCEPTABLE)

☐ Attending ☐ Consulting ☐ Other ordering

UPIN:_____

TELEPHONE #: (_ _ _) _ _ _ - _ _ _ _

08/16/93

SECTION A: (To be completed by the supplier)

CERTIFICATION TYPE:	Check the appropriate box to indicate if this CMN is the initial certification for this patient or if this is a revised certification.
BENEFICIARY INFORMATION:	Indicate the beneficiary's name, permanent legal address, telephone number and his/her health insurance claim number (HICN) as it appears on the beneficiary's Medicare card and on your claim form.
PLACE OF SERVICE:	Indicate the place in which the item is being used, i.e., patient's home is 12, skilled nursing facility (SNF) is 31, End Stage Renal Disease (ESRD) facility is 65, etc. Refer to your supplier manual for a complete index.
REPLACEMENT:	If the item billed is a replacement for a previously purchased item, place a check mark in the blank.
FACILITY NAME:	If the place of service is a facility, indicate the name and complete address of the facility.
SUPPLIER INFORMATION:	Indicate the name of your company (supplier name), address and telephone number along with the Medicare Supplier Number assigned to you by the National Supplier Clearinghouse (NSC).
HCPCS CODES:	List all procedure codes for items ordered that require a CMN. Procedure codes that do not require a certification should not be listed on the CMN. If the item ordered is purchased equipment, indicate whether the equipment is covered by a warranty. "Y" denotes that there is a warranty and "N" indicates there is no warranty. If it is covered by a warranty, the length and type of warranty must be indicated.

SECTION B: (To be completed by the physician or physician's employee)

DIAGNOSIS:	In the first space, list the ICD9 code that represents the primary reason for ordering this item. List any additional ICD9 codes that would further describe the medical need for the item (up to 3).
EXAMINATION DATE:	Indicate the date (MM/DD/YY) the patient was last seen by the ordering physician prior to the beginning of this certification period.
PT. HT., PT. WT., DOB:	Indicate the patient's height in inches and weight in pounds (when required by individual policy). Indicate patient's date of birth (MM/DD/YY).
DATE NEEDED:	Indicate the date (MM/DD/YY) the ordered item was initially needed outside the hospital setting. If this certification is a revised certification, also indicate the effective date of the order change.
EST. LENGTH OF NEED:	Indicate the estimated length of need (the length of time the physician expects the patient to require use of the ordered item) by filling in the appropriate number of months. If the physician expects that the patient will require the item for the duration of his/her life, then enter 99.
QUESTION SECTION:	This section is used to gather clinical information to determine medical necessity. Answer each question within the category of the items ordered, using "Y" for yes, "N" for no, and "D" for does not apply, unless otherwise noted.
PHYSICIAN INFORMATION:	The physician's signature certifies that the item ordered is medically necessary for this patient and that section B was completed or reviewed by the physician. This form must be signed and dated by the physician. Signature and date stamps are not acceptable. The physician must indicate whether he/she is the attending, consulting or other ordering physician by putting a check mark in the appropriate box. Indicate other ordering when you are neither the attending or consulting physician. Refer to your supplier manual for more information.
PHYSICIAN NAME, ADDRESS:	Indicate physician's name and complete mailing address.
UPIN:	The physician must indicate his/her Unique Physician Identification Number (UPIN).
PHYSICIAN'S TELEPHONE NO:	The physician must give a telephone number where he/she can be contacted (preferably a number where records would be accessible pertaining to this patient) if more information is needed.

Effective 10/93 DURABLE MEDICAL EQUIPMENT REGIONAL CARRIER DMERC 03.01

CERTIFICATE OF MEDICAL NECESSITY: RESPIRATORY EQUIPMENT

SECTION A **CERTIFICATION:** ☐ INITIAL ☐ REVISED

PATIENT NAME, ADDRESS, TELEPHONE AND HIC NO.	SUPPLIER NAME, ADDRESS, TELEPHONE, AND NSC NUMBER
(_ _ _) _ _ _ - _ _ _ _ HICN_____	(_ _ _) _ _ _ - _ _ _ _ NSC _____
PLACE OF SERVICE ____ REPLACEMENT ITEM ____	HCPCS CODE(S) WARRANTY LENGTH TYPE
NAME AND ADDRESS OF FACILITY IF APPLICABLE (SEE BACK OF FORM):	_____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____

SECTION B **INFORMATION BELOW TO BE COMPLETED ONLY BY THE PHYSICIAN OR PHYSICIAN'S EMPLOYEE**

DIAGNOSIS (ICD9): _____ _____ _____ _____	DOB ____/____/____
I LAST EXAMINED THIS PATIENT FOR THIS CONDITION ON: _____/_____/_____ PT. SEX ____ (M OR F)	DATE NEEDED INITIAL ____/____/____ REVISED ____/____/____ EST. LENGTH OF NEED: # OF MONTHS: ___ 1-99 (99 = LIFETIME)

ANSWER QUESTIONS 12-14 FOR CPAP, 18-22 FOR SUCTION PUMP. Use Y - Yes, N - No, or D for Does Not Apply unless otherwise noted.

1. Reserved for future use.
2. Reserved for future use.
3. Reserved for future use.
4. Reserved for future use.
5. Reserved for future use.
6. Reserved for future use.
7. Reserved for future use.
8. Reserved for future use.
9. Reserved for future use.
10. Reserved for future use.
11. Reserved for future use.

CONTINUOUS POSITIVE AIRWAY PRESSURE SYSTEM (CPAP)

___ 12. How many episodes of apnea lasting greater than 10 seconds does the patient have during 6-7 hours of recorded sleep? (Number of episodes).

[ ] 13. Is surgery a likely alternative to CPAP?

[ ] 14. Does the patient have obstructive sleep apnea?

15. Reserved for future use.
16. Reserved for future use.
17. Reserved for future use.

SUCTION PUMP

[ ] 18. Does the patient have difficulty raising and clearing secretions?

[ ] 19. Does the patient have cancer or surgery of the throat or mouth?

[ ] 20. Does patient have dysfunction of the swallowing muscles?

[ ] 21. Is the patient unconscious or in an obtunded state?

[ ] 22. Does patient have a tracheostomy?

I certify the medical necessity of these items for this patient. Section B of this form and any statement on my letterhead attached hereto has been completed by me, or by my employee and reviewed by me. The foregoing information is true, accurate, and complete, and I understand that any falsification, omission, or concealment of material fact may subject me to civil or criminal liability.

PHYSICIAN NAME, ADDRESS	_____ __/__/__ PHYSICIAN'S SIGNATURE: DATE (A STAMPED SIGNATURE IS NOT ACCEPTABLE) ☐ Attending ☐ Consulting ☐ Other ordering UPIN:_____ TELEPHONE #: (_ _ _) _ _ _ - _ _ _ _

08/16/93

SECTION A: (To be completed by the supplier)

CERTIFICATION TYPE:	Check the appropriate box to indicate if this CMN is the initial certification for this patient or if this is a revised certification.
BENEFICIARY INFORMATION:	Indicate the beneficiary's name, permanent legal address, telephone number and his/her health insurance claim number (HICN) as it appears on the beneficiary's Medicare card and on your claim form.
PLACE OF SERVICE:	Indicate the place in which the item is being used, i.e., patient's home is 12, skilled nursing facility (SNF) is 31, End Stage Renal Disease (ESRD) facility is 65, etc. Refer to your supplier manual for a complete index.
REPLACEMENT:	If the item billed is a replacement for a previously purchased item, place a check mark in the blank.
FACILITY NAME:	If the place of service is a facility, indicate the name and complete address of the facility.
SUPPLIER INFORMATION:	Indicate the name of your company (supplier name), address and telephone number along with the Medicare Supplier Number assigned to you by the National Supplier Clearinghouse (NSC).
HCPCS CODES:	List all procedure codes for items ordered that require a CMN. Procedure codes that do not require a certification should not be listed on the CMN. If the item ordered is purchased equipment, indicate whether the equipment is covered by a warranty. "Y" denotes that there is a warranty and "N" indicates there is no warranty. If it is covered by a warranty, the length and type of warranty must be indicated.

SECTION B: (To be completed by the physician or physician's employee)

DIAGNOSIS:	In the first space, list the ICD9 code that represents the primary reason for ordering this item. List any additional ICD9 codes that would further describe the medical need for the item (up to 3).
EXAMINATION DATE:	Indicate the date (MM/DD/YY) the patient was last seen by the ordering physician prior to the beginning of this certification period.
DOB:	Indicate patient's date of birth (MM/DD/YY).
DATE NEEDED:	Indicate the date (MM/DD/YY) the ordered item was initially needed outside the hospital setting. If this certification is a revised certification, also indicate the effective date of the order change.
EST. LENGTH OF NEED:	Indicate the estimated length of need (the length of time the physician expects the patient to require use of the ordered item) by filling in the appropriate number of months. If the physician expects that the patient will require the item for the duration of his/her life, then enter 99.
QUESTION SECTION:	This section is used to gather clinical information to determine medical necessity. Answer each question within the category of the items ordered, using "Y" for yes, "N" for no, and "D" for does not apply, unless otherwise noted.
PHYSICIAN INFORMATION:	The physician's signature certifies that the item ordered is medically necessary for this patient and that section B was completed or reviewed by the physician. This form must be signed and dated by the physician. Signature and date stamps are not acceptable. The physician must indicate whether he/she is the attending, consulting or other ordering physician by putting a check mark in the appropriate box. Indicate other ordering when you are neither the attending or consulting physician. Refer to your supplier manual for more information.
PHYSICIAN NAME, ADDRESS:	Indicate physician's name and complete mailing address.
UPIN:	The physician must indicate his/her Unique Physician Identification Number (UPIN).
PHYSICIAN'S TELEPHONE NO:	The physician must give a telephone number where he/she can be contacted (preferably a number where records would be accessible pertaining to this patient) if more information is needed.

Effective 10/93 **DURABLE MEDICAL EQUIPMENT REGIONAL CARRIER** DMERC 04.01

CERTIFICATE OF MEDICAL NECESSITY: ORTHOTICS/LYMPHEDEMA PUMPS/OSTEOGENESIS STIMULATORS/THERAPEUTIC SHOES

SECTION A CERTIFICATION: ☐ INITIAL ☐ REVISED

PATIENT NAME, ADDRESS, TELEPHONE AND HIC NO.

(___) ___-____ HICN_____

SUPPLIER NAME, ADDRESS, TELEPHONE, AND NSC NUMBER

(___) ___-____ NSC _____

PLACE OF SERVICE ____ REPLACEMENT ITEM ____

NAME AND ADDRESS OF FACILITY IF APPLICABLE (SEE BACK OF FORM):

HCPCS CODE(S)	WARRANTY	LENGTH	TYPE

SECTION B INFORMATION BELOW TO BE COMPLETED ONLY BY THE PHYSICIAN OR PHYSICIAN'S EMPLOYEE (EXCEPT QUESTIONS 1-6)

DIAGNOSIS (ICD9): _____ _____ _____ _____

DOB ____/____/____

I LAST EXAMINED THIS PATIENT FOR THIS CONDITION ON: _____/_____/_____ PT. SEX ____ (M OR F)

DATE NEEDED INITIAL ____/____/____ REVISED ____/____/____
EST. LENGTH OF NEED: # OF MONTHS: ____ 1-99 (99 = LIFETIME)

ANSWER QUESTIONS 1-6 FOR ANKLE-FOOT AND KNEE-ANKLE-FOOT ORTHOTICS, 7-11 FOR LYMPHEDEMA PUMPS, 12-15 FOR OSTEOGENESIS STIMULATORS, 16 FOR THERAPEUTIC SHOES. Use Y - Yes, N - No, or D for Does Not Apply unless otherwise noted.

ANKLE-FOOT/KNEE-ANKLE-FOOT ORTHOTICS

[ ] 1. Does the patient have weakness or deformity of the foot and ankle which requires stabilization to achieve functional benefit?

[ ] 2. Does the patient have weakness or deformity of the knee which requires stabilization to achieve functional benefit?

[ ] 3. Is the condition expected to exist for more than 6 months?

[ ] 4. Is the patient unable to be fitted with a custom-fitted orthosis?

[ ] 5. Is there a need to control the knee, ankle, or foot in more than one plane?

[ ] 6. Does the patient have a documented neurological, circulatory, or orthopedic status (e.g. a healing fracture lacking normal anatomical integrity or anthropometric proportions) that requires custom fabricating over a model to prevent tissue injury?

LYMPHEDEMA PUMP

[ ] 7. Does the patient have a malignant tumor with obstruction of the lymphatic drainage of an extremity?

[ ] 8. Has the patient had surgery or radiation that interrupted normal lymphatic drainage or is there a congenital abnormality of lymphatic drainage?

[ ] 9. Is the device prescribed for the treatment of chronic venous insufficiency with edema and/or venous ulcers?

[ ] 10. Is there postinflammatory lymphatic obstruction?

[ ] 11. Have suitable instructions as to the pressure to be used and the frequency and duration of use been provided?

OSTEOGENESIS STIMULATOR

[ ] 12. Does the patient have a nonunion of a long bone fracture?

[ ] 13. Does the patient have a failed fusion?

[ ] 14. Does the patient have a congenital pseudarthrosis?

____ 15. How many months ago did the patient sustain the long bone fracture being treated or have the fusion that has failed? (ENTER THE NUMBER OF MONTHS 1 - 99)

THERAPEUTIC SHOES

[ ] 16. Are you the physician who is managing the patient's systemic diabetic condition?

I certify the medical necessity of these items for this patient. Section B of this form and any statement on my letterhead attached hereto has been completed by me, or by my employee and reviewed by me (except questions 1-6, which do not require physician completion but do require physician review). The foregoing information is true, accurate, and complete, and I understand that any falsification, omission, or concealment of material fact may subject me to civil or criminal liability.

PHYSICIAN NAME, ADDRESS

_____ __/__/__
PHYSICIAN'S SIGNATURE: DATE
(A STAMPED SIGNATURE IS NOT ACCEPTABLE)

☐ Attending ☐ Consulting ☐ Other ordering

UPIN:_____

TELEPHONE #: (___) ___-____

08/16/93

SECTION A: (To be completed by the supplier)

CERTIFICATION TYPE:	Check the appropriate box to indicate if this CMN is the initial certification for this patient or if this is a revised certification.
BENEFICIARY INFORMATION:	Indicate the beneficiary's name, permanent legal address, telephone number and his/her health insurance claim number (HICN) as it appears on the beneficiary's Medicare card and on your claim form.
PLACE OF SERVICE:	Indicate the place in which the item is being used, i.e., patient's home is 12, skilled nursing facility (SNF) is 31, End Stage Renal Disease (ESRD) facility is 65, etc. Refer to your supplier manual for a complete index.
REPLACEMENT:	If the item billed is a replacement for a previously purchased item, place a check mark in the blank.
FACILITY NAME:	If the place of service is a facility, indicate the name and complete address of the facility.
SUPPLIER INFORMATION:	Indicate the name of your company (supplier name), address and telephone number along with the Medicare Supplier Number assigned to you by the National Supplier Clearinghouse (NSC).
HCPCS CODES:	List all procedure codes for items ordered that require a CMN. Procedure codes that do not require a certification should not be listed on the CMN. If the item ordered is purchased equipment, indicate whether the equipment is covered by a warranty. "Y" denotes that there is a warranty and "N" indicates there is no warranty. If it is covered by a warranty, the length and type of warranty must be indicated.

SECTION B: (To be completed by the physician or physician's employee, except for questions 1-6)

DIAGNOSIS:	In the first space, list the ICD9 code that represents the primary reason for ordering this item. List any additional ICD9 codes that would further describe the medical need for the item (up to 3).
EXAMINATION DATE:	Indicate the date (MM/DD/YY) the patient was last seen by the ordering physician prior to the beginning of this certification period.
DOB:	Indicate patient's date of birth (MM/DD/YY).
DATE NEEDED:	Indicate the date (MM/DD/YY) the ordered item was initially needed outside the hospital setting. If this certification is a revised certification, also indicate the effective date of the order change.
EST. LENGTH OF NEED:	Indicate the estimated length of need (the length of time the physician expects the patient to require use of the ordered item) by filling in the appropriate number of months. If the physician expects that the patient will require the item for the duration of his/her life, then enter 99.
QUESTION SECTION:	This section is used to gather clinical information to determine medical necessity. Answer each question within the category of items ordered, using "Y" for yes, "N" for no, and "D" for does not apply, unless otherwise noted. Questions 1-6 (Ankle-Foot/Knee-Ankle-Foot Orthotics) do not require physician completion, but do require physician review.
PHYSICIAN INFORMATION:	The physician's signature certifies that the item ordered is medically necessary for this patient and that section B was completed or reviewed by the physician. This form must be signed and dated by the physician. Signature and date stamps are not acceptable. The physician must indicate whether he/she is the attending, consulting or other ordering physician by putting a check mark in the appropriate box. Indicate other ordering when you are neither the attending or consulting physician. Refer to your supplier manual for more information.
PHYSICIAN NAME, ADDRESS:	Indicate physician's name and complete mailing address.
UPIN:	The physician must indicate his/her Unique Physician Identification Number (UPIN).
PHYSICIAN'S TELEPHONE NO:	The physician must give a telephone number where he/she can be contacted (preferably a number where records would be accessible pertaining to this patient) if more information is needed.

Effective 10/93 **DURABLE MEDICAL EQUIPMENT REGIONAL CARRIER** DMERC 05.01

CERTIFICATE OF MEDICAL NECESSITY: SURGICAL DRESSINGS / UROLOGICAL SUPPLIES

SECTION A **CERTIFICATION:** ☐ INITIAL

PATIENT NAME, ADDRESS, TELEPHONE AND HIC NO.	SUPPLIER NAME, ADDRESS, TELEPHONE, AND NSC NUMBER
(___) ___-____ HICN_____	(___) ___-____ NSC _____
PLACE OF SERVICE ____ REPLACEMENT ITEM ____	HCPCS CODE(S)
NAME AND ADDRESS OF FACILITY IF APPLICABLE (SEE BACK OF FORM):	

SECTION B **CLINICAL INFORMATION**

DIAGNOSIS (ICD9): _____ _____ _____ _____	DOB ____/____/____
I LAST EXAMINED THIS PATIENT FOR THIS CONDITION ON: _____/_____/_____ PT. SEX ____ (M OR F)	DATE NEEDED INITIAL ____/____/____ REVISED ____/____/____ EST. LENGTH OF NEED: # OF MONTHS: ____ 1-99 (99 = LIFETIME)

ANSWER QUESTIONS 1-3 AND 5-7 FOR SURGICAL DRESSINGS, AND 4-7 FOR UROLOGICAL SUPPLIES
Use Y - Yes, N - No or D for Does Not Apply unless otherwise noted.

SURGICAL DRESSINGS

[ ] 1. Does the patient have a surgical wound?

____ 2. Number of surgical wounds (enter number).

3. Date of surgical procedure: (MM/DD/YY) ____/____/____

UROLOGICAL SUPPLIES

[ ] 4. Does the patient have permanent urinary incontinence?

5. Dressings/Urological Supplies Ordered	6. HCPCS Code	7. Frequency of Change

I certify the medical necessity of these items for this patient. Section B of this form and any statement on my letterhead attached hereto has been completed by me or reviewed by me. The foregoing information is true, accurate, and complete, and I understand that any falsification, omission, or concealment of material fact may subject me to civil or criminal liability.

PHYSICIAN NAME, ADDRESS

_____ __/__/__
PHYSICIAN'S SIGNATURE: DATE
(A STAMPED SIGNATURE IS NOT ACCEPTABLE)

☐ Attending ☐ Consulting ☐ Other ordering

UPIN:_____

TELEPHONE #: (___) ___-____

08/16/93

SECTION A: (To be completed by the supplier)

CERTIFICATION TYPE:	Check the appropriate box to indicate if this CMN is the initial certification for this patient or if this is a revised certification.
BENEFICIARY INFORMATION:	Indicate the beneficiary's name, permanent legal address, telephone number and his/her health insurance claim number (HICN) as it appears on the beneficiary's Medicare card and on your claim form.
PLACE OF SERVICE:	Indicate the place in which the item is being used, i.e., patient's home is 12, skilled nursing facility (SNF) is 31, End Stage Renal Disease (ESRD) facility is 65, etc. Refer to your supplier manual for a complete index.
REPLACEMENT:	If the item billed is a replacement for a previously purchased item, place a check mark in the blank.
FACILITY NAME:	If the place of service is a facility, indicate the name and complete address of the facility.
SUPPLIER INFORMATION:	Indicate the name of your company (supplier name), address and telephone number along with the Medicare Supplier Number assigned to you by the National Supplier Clearinghouse (NSC).
HCPCS CODES:	List all procedure codes for items ordered that require a CMN. Procedure codes that do not require a certification should not be listed on the CMN. If the item ordered is purchased equipment, indicate whether the equipment is covered by a warranty. "Y" denotes that there is a warranty and "N" indicates there is no warranty. If it is covered by a warranty, the length and type of warranty must be indicated.

SECTION B: (To be completed or reviewed and signed by the ordering physician)

DIAGNOSIS:	In the first space, list the ICD9 code that represents the primary reason for ordering this item. List any additional ICD9 codes that would further describe the medical need for the item (up to 3).
EXAMINATION DATE:	Indicate the date (MM/DD/YY) the patient was last seen by the ordering physician prior to the beginning of this certification period.
DOB:	Indicate patient's date of birth (MM/DD/YY).
DATE NEEDED:	Indicate the date (MM/DD/YY) the ordered item was initially needed outside the hospital setting. If this certification is a revised certification, also indicate the effective date of the order change.
EST. LENGTH OF NEED:	Indicate the estimated length of need (the length of time the physician expects the patient to require use of the ordered item) by filling in the appropriate number of months. If the physician expects that the patient will require the item for the duration of his/her life, then enter 99.
QUESTION SECTION:	This section is used to gather clinical information to determine medical necessity. Answer each question within the category of the items ordered, using "Y" for yes, "N" for no, and "D" for does not apply, unless otherwise noted.
PHYSICIAN INFORMATION:	The physician's signature certifies that the item ordered is medically necessary for this patient and that section B was completed or reviewed by the physician. This form must be signed and dated by the physician. Signature and date stamps are not acceptable. The physician must indicate whether he/she is the attending, consulting or other ordering physician by putting a check mark in the appropriate box. Indicate other ordering when you are neither the attending or consulting physician. Refer to your supplier manual for more information.
PHYSICIAN NAME, ADDRESS:	Indicate physician's name and complete mailing address.
UPIN:	The physician must indicate his/her Unique Physician Identification Number (UPIN).
PHYSICIAN'S TELEPHONE NO:	The physician must give a telephone number where he/she can be contacted (preferably a number where records would be accessible pertaining to this patient) if more information is needed.
DRESSINGS/SUPPLIES ORDERED:	Describe the type of dressing or urological supplies ordered (use of a brand name optional).
HCPCS CODE:	In the spaces provided, indicate the appropriate HCPCS code(s) for the item(s) ordered.
FREQUENCY OF CHANGE:	In the space provided, indicate frequency of change for each item ordered. (Refer to medical policy)

Effective 10/93 **DURABLE MEDICAL EQUIPMENT REGIONAL CARRIER** DMERC 06.01

CERTIFICATE OF MEDICAL NECESSITY: TENS

SECTION A **CERTIFICATION:** ☐ INITIAL ☐ REVISED

PATIENT NAME, ADDRESS, TELEPHONE AND HIC NO.	SUPPLIER NAME, ADDRESS, TELEPHONE, AND NSC NUMBER
(___) ___-____ HICN_____	(___) ___-____ NSC _____
PLACE OF SERVICE ____ REPLACEMENT ITEM ____	HCPCS CODE(S) WARRANTY LENGTH TYPE
NAME AND ADDRESS OF FACILITY IF APPLICABLE (SEE BACK OF FORM):	_____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____

SECTION B **INFORMATION BELOW TO BE COMPLETED ONLY BY THE PHYSICIAN OR PHYSICIAN'S EMPLOYEE**

DIAGNOSIS (ICD9): _____ _____ _____ _____	DOB ____/____/____
I LAST EXAMINED THIS PATIENT FOR THIS CONDITION ON: _____/_____/_____ PT. SEX ____ (M OR F)	DATE NEEDED INITIAL ____/____/____ REVISED ____/____/____ EST. LENGTH OF NEED: # OF MONTHS: ___ 1-99 (99 = LIFETIME)

ANSWER QUESTIONS 1-6 FOR RENTAL OF TENS, AND 3-12 FOR PURCHASE OF TENS **Use Y - Yes, N - No or D for Does Not Apply unless otherwise noted.**

[ ] 1. Does the patient have acute post-operative pain?

2. What is the date of the surgery resulting in acute post-operative pain?
_____/_____/_____

[ ] 3. Does the patient have chronic, intractable pain?

___ 4. How long has the patient had intractable pain?
Enter number of months 1-99.

___ 5. For which, if any, of the following conditions is the TENS unit being prescribed?
1 - Headache
2 - Visceral abdominal pain
3 - Pelvic pain
4 - Temporomandibular joint (TMJ) pain
5 - None of the above

[ ] 6. Is there documentation in the medical record of multiple medications and/or other therapies that have been tried and failed?

[ ] 7. Has the patient received a TENS trial?

8. What are the dates that trial of TENS unit began and ended?
_____/_____/_____ to _____/_____/_____

9. What is the date that you reevaluated the patient at the end of the trial period?
_____/_____/_____

___ 10. How often has the patient been using the TENS?
1 = Daily
2 = 3 to 6 days per week
3 = 2 or less days per week

[ ] 11. Do you and the patient agree that there has been a significant improvement in the pain and that long term use of a TENS is warranted?

___ 12. Number of TENS leads (i.e., separate electrodes) routinely needed and used by the patient at any one time:
2 = 2 Leads
4 = 4 Leads

I certify the medical necessity of these items for this patient. Section B of this form and any statement on my letterhead attached hereto has been completed by me, or by my employee and reviewed by me. The foregoing information is true, accurate, and complete, and I understand that any falsification, omission, or concealment of material fact may subject me to civil or criminal liability.

PHYSICIAN NAME, ADDRESS	_____ __/__/__ PHYSICIAN'S SIGNATURE: DATE (A STAMPED SIGNATURE IS NOT ACCEPTABLE) ☐ Attending ☐ Consulting ☐ Other ordering UPIN:_____ TELEPHONE #: (___) ___-____

08/16/93

SECTION A: (To be completed by the supplier)

CERTIFICATION TYPE:	Check the appropriate box to indicate if this CMN is the initial certification for this patient or if this is a revised certification.
BENEFICIARY INFORMATION:	Indicate the beneficiary's name, permanent legal address, telephone number and his/her health insurance claim number (HICN) as it appears on the beneficiary's Medicare card and on your claim form.
PLACE OF SERVICE:	Indicate the place in which the item is being used, i.e., patient's home is 12, skilled nursing facility (SNF) is 31, End Stage Renal Disease (ESRD) facility is 65, etc. Refer to your supplier manual for a complete index.
REPLACEMENT:	If the item billed is a replacement for a previously purchased item, place a check mark in the blank.
FACILITY NAME:	If the place of service is a facility, indicate the name and complete address of the facility.
SUPPLIER INFORMATION:	Indicate the name of your company (supplier name), address and telephone number along with the Medicare Supplier Number assigned to you by the National Supplier Clearinghouse (NSC).
HCPCS CODES:	List all procedure codes for items ordered that require a CMN. Procedure codes that do not require a certification should not be listed on the CMN. If the item ordered is purchased equipment, indicate whether the equipment is covered by a warranty. "Y" denotes that there is a warranty and "N" indicates there is no warranty. If it is covered by a warranty, the length and type of warranty must be indicated.

SECTION B: (To be completed by the physician or physician's employee)

DIAGNOSIS:	In the first space, list the ICD9 code that represents the primary reason for ordering this item. List any additional ICD9 codes that would further describe the medical need for the item (up to 3).
EXAMINATION DATE:	Indicate the date (MM/DD/YY) the patient was last seen by the ordering physician prior to the beginning of this certification period.
DOB:	Indicate patient's date of birth (MM/DD/YY).
DATE NEEDED:	Indicate the date (MM/DD/YY) the ordered item was initially needed outside the hospital setting. If this certification is a revised certification, also indicate the effective date of the order change.
EST. LENGTH OF NEED:	Indicate the estimated length of need (the length of time the physician expects the patient to require use of the ordered item) by filling in the appropriate number of months. If the physician expects that the patient will require the item for the duration of his/her life, then enter 99.
QUESTION SECTION:	This section is used to gather clinical information to determine medical necessity. Answer each question within the category of the items ordered, using "Y" for yes, "N" for no, and "D" for does not apply, unless otherwise noted.
PHYSICIAN INFORMATION:	The physician's signature certifies that the item ordered is medically necessary for this patient and that section B was completed or reviewed by the physician. This form must be signed and dated by the physician. Signature and date stamps are not acceptable. The physician must indicate whether he/she is the attending, consulting or other ordering physician by putting a check mark in the appropriate box. Indicate other ordering when you are neither the attending or consulting physician. Refer to your supplier manual for more information.
PHYSICIAN NAME, ADDRESS:	Indicate physician's name and complete mailing address.
UPIN:	The physician must indicate his/her Unique Physician Identification Number (UPIN).
PHYSICIAN'S TELEPHONE NO:	The physician must give a telephone number where he/she can be contacted (preferably a number where records would be accessible pertaining to this patient) if more information is needed.

Effective 10/93 **DURABLE MEDICAL EQUIPMENT REGIONAL CARRIER** DMERC 07.01

CERTIFICATE OF MEDICAL NECESSITY: SEAT LIFT MECHANISMS/POWER OPERATED VEHICLES (POV)

SECTION A **CERTIFICATION:** ☐ **INITIAL** ☐ **REVISED**

PATIENT NAME, ADDRESS, TELEPHONE AND HIC NO.

(___) ___-____ HICN_____

SUPPLIER NAME, ADDRESS, TELEPHONE, AND NSC NUMBER

(___) ___-____ NSC _____

PLACE OF SERVICE ____ REPLACEMENT ITEM ____

NAME AND ADDRESS OF FACILITY IF APPLICABLE (SEE BACK OF FORM):

HCPCS CODE(S)	WARRANTY	LENGTH	TYPE

SECTION B **INFORMATION BELOW TO BE COMPLETED ONLY BY THE PHYSICIAN OR PHYSICIAN'S EMPLOYEE**

DIAGNOSIS (ICD9): _____ _____ _____ _____

DOB ____/____/____

I LAST EXAMINED THIS PATIENT FOR THIS CONDITION ON: _____/_____/_____ PT. SEX. ____ (M OR F)

DATE NEEDED INITIAL ____/____/____ REVISED ____/____/____
EST. LENGTH OF NEED: # OF MONTHS: ____ 1-99 (99 = LIFETIME)

ANSWER QUESTIONS 1-5 FOR SEAT LIFT MECHANISMS, ANSWER QUESTIONS 6-14 FOR POWER OPERATED VEHICLES (POV)
Use Y - Yes, N - No or D for Does Not Apply unless otherwise noted.

SEAT LIFT MECHANISM

[ ] 1. Does the patient have severe arthritis of the hip or knee?

[ ] 2. Does the patient have a severe neuromuscular disease?

[ ] 3. Is the patient completely incapable of standing up from a regular armchair or any chair in his/her home?

[ ] 4. Once standing, does the patient have the ability to ambulate?

[ ] 5. Have all appropriate therapeutic modalities to enable the patient to transfer from a chair to a standing position (e.g., medication, physical therapy) been tried and failed? If YES, this is documented in the patient's records.

POWER OPERATED VEHICLE

[ ] 6. Would the patient be bed or chair confined without the use of a wheelchair?

[ ] 7. Is the patient unable to operate a manual wheelchair?

[ ] 8. Can the patient ambulate in the home but the POV is required for movement outside the home?

[ ] 9. Is the patient capable of safely transferring in and out of the POV?

[ ] 10. Is the patient capable of safely operating the controls of the POV?

[ ] 11. Does the patient have adequate trunk stability to be able to safely ride in the POV?

[ ] 12. Are you a specialist in physical medicine, orthopedic surgery, neurology, or rheumatology?

[ ] 13. Is the patient more than one day's roundtrip from a specialist in physical medicine, orthopedic surgery, neurology, or rheumatology?

[ ] 14. Does the patient's condition preclude a visit to a specialist in physical medicine, orthopedic surgery, neurology, or rheumatology?

I certify the medical necessity of these items for this patient. Section B of this form and any statement on my letterhead attached hereto has been completed by me, or by my employee and reviewed by me. The foregoing information is true, accurate, and complete, and I understand that any falsification, omission, or concealment of material fact may subject me to civil or criminal liability.

PHYSICIAN NAME, ADDRESS

_____ __/__/__
PHYSICIAN'S SIGNATURE: DATE
(A STAMPED SIGNATURE IS NOT ACCEPTABLE)

☐ Attending ☐ Consulting ☐ Other ordering

UPIN:_____

TELEPHONE #: (___) ___-____

08/16/93

SECTION A: (To be completed by the supplier)

CERTIFICATION TYPE:	Check the appropriate box to indicate if this CMN is the initial certification for this patient or if this is a revised certification.
BENEFICIARY INFORMATION:	Indicate the beneficiary's name, permanent legal address, telephone number and his/her health insurance claim number (HICN) as it appears on the beneficiary's Medicare card and on your claim form.
PLACE OF SERVICE:	Indicate the place in which the item is being used, i.e., patient's home is 12, skilled nursing facility (SNF) is 31, End Stage Renal Disease (ESRD) facility is 65, etc. Refer to your supplier manual for a complete index.
REPLACEMENT:	If the item billed is a replacement for a previously purchased item, place a check mark in the blank.
FACILITY NAME:	If the place of service is a facility, indicate the name and complete address of the facility.
SUPPLIER INFORMATION:	Indicate the name of your company (supplier name), address and telephone number along with the Medicare Supplier Number assigned to you by the National Supplier Clearinghouse (NSC).
HCPCS CODES:	List all procedure codes for items ordered that require a CMN. Procedure codes that do not require a certification should not be listed on the CMN. If the item ordered is purchased equipment, indicate whether the equipment is covered by a warranty. "Y" denotes that there is a warranty and "N" indicates there is no warranty. If it is covered by a warranty, the length and type of warranty must be indicated.

SECTION B: (To be completed by the physician or physician's employee)

DIAGNOSIS:	In the first space, list the ICD9 code that represents the primary reason for ordering this item. List any additional ICD9 codes that would further describe the medical need for the item (up to 3).
EXAMINATION DATE:	Indicate the date (MM/DD/YY) the patient was last seen by the ordering physician prior to the beginning of this certification period.
DOB:	Indicate patient's date of birth (MM/DD/YY).
DATE NEEDED:	Indicate the date (MM/DD/YY) the ordered item was initially needed outside the hospital setting. If this certification is a revised certification, also indicate the effective date of the order change.
EST. LENGTH OF NEED:	Indicate the estimated length of need (the length of time the physician expects the patient to require use of the ordered item) by filling in the appropriate number of months. If the physician expects that the patient will require the item for the duration of his/her life, then enter 99.
QUESTION SECTION:	This section is used to gather clinical information to determine medical necessity. Answer each question within the category of the items ordered, using "Y" for yes, "N" for no, and "D" for does not apply, unless otherwise noted.
PHYSICIAN INFORMATION:	The physician's signature certifies that the item ordered is medically necessary for this patient and that section B was completed or reviewed by the physician. This form must be signed and dated by the physician. Signature and date stamps are not acceptable. The physician must indicate whether he/she is the attending, consulting or other ordering physician by putting a check mark in the appropriate box. Indicate other ordering when you are neither the attending or consulting physician. Refer to your supplier manual for more information.
PHYSICIAN NAME, ADDRESS:	Indicate physician's name and complete mailing address.
UPIN:	The physician must indicate his/her Unique Physician Identification Number (UPIN).
PHYSICIAN'S TELEPHONE NO:	The physician must give a telephone number where he/she can be contacted (preferably a number where records would be accessible pertaining to this patient) if more information is needed.

Effective 10/93 **DURABLE MEDICAL EQUIPMENT REGIONAL CARRIER** DMERC 08.01

CERTIFICATE OF MEDICAL NECESSITY IMMUNOSUPPRESSIVE DRUGS

SECTION A **CERTIFICATION:** ☐ INITIAL ☐ REVISED

PATIENT NAME, ADDRESS, TELEPHONE AND HIC NO.

(_ _ _) _ _ _ - _ _ _ _ HICN_____

SUPPLIER NAME, ADDRESS, TELEPHONE, AND NSC NUMBER

(_ _ _) _ _ _ - _ _ _ _ NSC _____

PLACE OF SERVICE ____ REPLACEMENT ITEM ____

NAME AND ADDRESS OF FACILITY IF APPLICABLE (SEE BACK OF FORM):

HCPCS CODE(S) WARRANTY LENGTH TYPE

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

SECTION B **CLINICAL INFORMATION**

DIAGNOSIS (ICD9): _____ _____ _____ _____

PT. HT. ____ (IN.) PT. WT. ____ (LBS) DOB ____/____/____

I LAST EXAMINED THIS PATIENT FOR THIS CONDITION ON: _____/_____/_____ PT. SEX ____ (M OR F)

DATE NEEDED INITIAL ____/____/____ REVISED ____/____/____

EST. LENGTH OF NEED: # OF MONTHS: ____ 1-99 (99 = LIFETIME)

ANSWER QUESTIONS 1-12 FOR IMMUNOSUPPRESSIVE DRUGS Use Y - Yes, N - No or D for Does Not Apply unless otherwise noted.

What are the drug(s) prescribed and the dosage and frequency of administration of each?

	HCPCS	MG	TIMES PER DAY
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

[ ] 4. Has the patient had an organ transplant that was covered by Medicare?

___ 5. Which organ/organs have been transplanted? (Most recent transplant)
___
___

1 - Heart
2 - Liver
3 - Kidney
4 - Bone Marrow
5 - Lung

May enter up to three different organs.

6. On what date was the transplant surgery performed, requiring this therapy?

____/____/____

7. Transplant procedure code (CPT code).

_____

8. Name of facility where transplant was performed.

_____

9. City where facility is located.

_____

___ 10. State where facility is located.

11. On what date was the patient discharged from the hospital following this transplant surgery?

____/____/____

[ ] 12. Was there a prior transplant failure of this same organ?

I certify the medical necessity of these items for this patient. Section B of this form and any statement on my letterhead attached hereto has been completed by me, or reviewed by me. The foregoing information is true, accurate, and complete, and I understand that any falsification, omission, or concealment of material fact may subject me to civil or criminal liability.

PHYSICIAN NAME, ADDRESS

_____ __/__/__
PHYSICIAN'S SIGNATURE: DATE
(A STAMPED SIGNATURE IS NOT ACCEPTABLE)

☐ Attending ☐ Consulting ☐ Other ordering

UPIN:_____

TELEPHONE #: (_ _ _) _ _ _ - _ _ _ _

08/16/93

SECTION A: (To be completed by the supplier)

CERTIFICATION TYPE:	Check the appropriate box to indicate if this CMN is the initial certification for this patient or if this is a revised certification.
BENEFICIARY INFORMATION:	Indicate the beneficiary's name, permanent legal address, telephone number and his/her health insurance claim number (HICN) as it appears on the beneficiary's Medicare card and on your claim form.
PLACE OF SERVICE:	Indicate the place in which the item is being used, i.e., patient's home is 12, skilled nursing facility (SNF) is 31, End Stage Renal Disease (ESRD) facility is 65, etc. Refer to your supplier manual for a complete index.
REPLACEMENT:	If the item billed is a replacement for a previously purchased item, place a check mark in the blank.
FACILITY NAME:	If the place of service is a facility, indicate the name and complete address of the facility.
SUPPLIER INFORMATION:	Indicate the name of your company (supplier name), address and telephone number along with the Medicare Supplier Number assigned to you by the National Supplier Clearinghouse (NSC).
HCPCS CODES:	List all procedure codes for items ordered that require a CMN. Procedure codes that do not require a certification should not be listed on the CMN. If the item ordered is purchased equipment, indicate whether the equipment is covered by a warranty. "Y" denotes that there is a warranty and "N" indicates there is no warranty. If it is covered by a warranty, the length and type of warranty must be indicated.

SECTION B: (To be completed or reviewed and signed by the ordering physician)

DIAGNOSIS:	In the first space, list the ICD9 code that represents the primary reason for ordering this item. List any additional ICD9 codes that would further describe the medical need for the item (up to 3).
EXAMINATION DATE:	Indicate the date (MM/DD/YY) the patient was last seen by the ordering physician prior to the beginning of this certification period.
PT. HT., PT. WT., DOB:	Indicate the patient's height in inches and weight in pounds. Indicate patient's date of birth (MM/DD/YY).
DATE NEEDED:	Indicate the date (MM/DD/YY) the ordered item was initially needed outside the hospital setting. If this certification is a revised certification, also indicate the effective date of the order change.
EST. LENGTH OF NEED:	Indicate the estimated length of need (the length of time the physician expects the patient to require use of the ordered item) by filling in the appropriate number of months. If the physician expects that the patient will require the item for the duration of his/her life, then enter 99.
QUESTION SECTION:	This section is used to gather clinical information to determine medical necessity. Answer each question, using "Y" for yes, "N" for no, and "D" for does not apply, unless otherwise noted.
PHYSICIAN INFORMATION:	The physician's signature certifies that the item ordered is medically necessary for this patient and that section B was completed or reviewed by the physician. This form must be signed and dated by the physician. Signature and date stamps are not acceptable. The physician must indicate whether he/she is the attending, consulting or other ordering physician by putting a check mark in the appropriate box. Indicate other ordering when you are neither the attending or consulting physician. Refer to your supplier manual for more information.
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Effective 10/93 **DURABLE MEDICAL EQUIPMENT REGIONAL CARRIER** DMERC 09.01

CERTIFICATE OF MEDICAL NECESSITY: INFUSION PUMPS/HOME GLUCOSE MONITORS

SECTION A **CERTIFICATION:** ☐ **INITIAL** ☐ **REVISED**

PATIENT NAME, ADDRESS, TELEPHONE AND HIC NO.

(_ _ _) _ _ _ - _ _ _ _ HICN_____

SUPPLIER NAME, ADDRESS, TELEPHONE, AND NSC NUMBER

(_ _ _) _ _ _ - _ _ _ _ NSC _____

PLACE OF SERVICE ____ REPLACEMENT ITEM ____

NAME AND ADDRESS OF FACILITY IF APPLICABLE (SEE BACK OF FORM):

HCPCS CODE(S) WARRANTY LENGTH TYPE

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

SECTION B **INFORMATION BELOW TO BE COMPLETED ONLY BY THE PHYSICIAN OR PHYSICIAN'S EMPLOYEE**

DIAGNOSIS (ICD9): _____ _____ _____ _____

PT. HT. ____ (IN.) PT. WT. ____ (LBS) DOB ____/____/____

I LAST EXAMINED THIS PATIENT FOR THIS CONDITION ON: _____/_____/_____ PT. SEX ____ (M OR F)

DATE NEEDED INITIAL ____/____/____ REVISED ____/____/____

EST. LENGTH OF NEED: # OF MONTHS: ____ 1-99 (99 = LIFETIME)

ANSWER QUESTIONS 1-8 FOR INFUSION PUMPS, ANSWER 9-13 FOR HOME GLUCOSE MONITORS Use Y - Yes, N - No or D for Does Not Apply unless otherwise noted.

INFUSION PUMP

____ 1. Which pump has been prescribed?
- 1 - Ambulatory infusion pump
- 2 - Stationary infusion pump
- 3 - Implantable infusion pump
- 4 - Disposable infusion pump (e.g., elastomeric)

2. Provide the HCPCS code for the drug that requires the use of the pump.

_____

3. If a non-specific code was used to answer question 2, provide the name of the drug.

_____

____ 4. What is the route of administration?
- 1 - Intravenous
- 2 - Intra-arterial
- 3 - Epidural
- 4 - Subcutaneous

____ 5. What is the method of administration?
- 1 - Continuous
- 2 - Intermittent
- 3 - Bolus

____ 6. What is the total duration of drug infusion per 24 hours? (Enter number of hours 1 - 24).

[ ] 7. Does the patient have intractable cancer pain which has failed to respond to an adequate oral/transdermal narcotic analgesic regimen or is the patient unable to tolerate oral/transdermal narcotics?

[ ] 8. Is the patient a cardiac transplant candidate on active status?

HOME GLUCOSE MONITOR

[ ] 9. Does the patient have insulin-treated diabetes?

[ ] 10. Does the patient have documented episodes of
- widely fluctuating blood sugars, and/or
- recurring insulin reactions, and/or
- ketoacidosis?

[ ] 11. Is the patient or caregiver capable of learning proper operation of the device?

[ ] 12. Is the device designed for home rather than clinic use?

____ 13. Approximately how many times per week is the patient expected to check his/her blood sugar? Enter the number of times per week 01 - 99.

I certify the medical necessity of these items for this patient. Section B of this form and any statement on my letterhead attached hereto has been completed by me, or by my employee and reviewed by me. The foregoing information is true, accurate, and complete, and I understand that any falsification, omission, or concealment of material fact may subject me to civil or criminal liability.

PHYSICIAN NAME, ADDRESS

_____ __/__/__

PHYSICIAN'S SIGNATURE: DATE
(A STAMPED SIGNATURE IS NOT ACCEPTABLE)

☐ Attending ☐ Consulting ☐ Other ordering

UPIN:_____

TELEPHONE #: (_ _ _) _ _ _ - _ _ _ _

08/16/93

SECTION A: (To be completed by the supplier)

CERTIFICATION TYPE:	Check the appropriate box to indicate if this CMN is the initial certification for this patient or if this is a revised certification.
BENEFICIARY INFORMATION:	Indicate the beneficiary's name, permanent legal address, telephone number and his/her health insurance claim number (HICN) as it appears on the beneficiary's Medicare card and on your claim form.
PLACE OF SERVICE:	Indicate the place in which the item is being used, i.e., patient's home is 12, skilled nursing facility (SNF) is 31, End Stage Renal Disease (ESRD) facility is 65, etc. Refer to your supplier manual for a complete index.
REPLACEMENT:	If the item billed is a replacement for a previously purchased item, place a check mark in the blank.
FACILITY NAME:	If the place of service is a facility, indicate the name and complete address of the facility.
SUPPLIER INFORMATION:	Indicate the name of your company (supplier name), address and telephone number along with the Medicare Supplier Number assigned to you by the National Supplier Clearinghouse (NSC).
HCPCS CODES:	List all procedure codes for items ordered that require a CMN. Procedure codes that do not require a certification should not be listed on the CMN. If the item ordered is purchased equipment, indicate whether the equipment is covered by a warranty. "Y" denotes that there is a warranty and "N" indicates there is no warranty. If it is covered by a warranty, the length and type of warranty must be indicated.

SECTION B: (To be completed by the physician or physician's employee)

DIAGNOSIS:	In the first space, list the ICD9 code that represents the primary reason for ordering this item. List any additional ICD9 codes that would further describe the medical need for the item (up to 3).
EXAMINATION DATE:	Indicate the date (MM/DD/YY) the patient was last seen by the ordering physician prior to the beginning of this certification period.
PT. HT., PT. WT., DOB:	Indicate the patient's height in inches and weight in pounds (for infusion pumps). Indicate patient's date of birth (MM/DD/YY).
DATE NEEDED:	Indicate the date (MM/DD/YY) the ordered item was initially needed outside the hospital setting. If this certification is a revised certification, also indicate the effective date of the order change.
EST. LENGTH OF NEED:	Indicate the estimated length of need (the length of time the physician expects the patient to require use of the ordered item) by filling in the appropriate number of months. If the physician expects that the patient will require the item for the duration of his/her life, then enter 99.
QUESTION SECTION:	This section is used to gather clinical information to determine medical necessity. Answer each question within the category of the items ordered, using "Y" for yes, "N" for no, and "D" for does not apply, unless otherwise noted.
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UPIN:	The physician must indicate his/her Unique Physician Identification Number (UPIN).
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Effective 10/93 **DURABLE MEDICAL EQUIPMENT REGIONAL CARRIER** DMERC 10.01

CERTIFICATE OF MEDICAL NECESSITY: PARENTERAL OR ENTERAL NUTRITION

SECTION A ☐ INITIAL ☐ REVISED ☐ RECERTIFICATION

PATIENT NAME, ADDRESS, TELEPHONE AND HIC NO.

(_ _ _) _ _ _ - _ _ _ _ HICN _____

SUPPLIER NAME, ADDRESS, TELEPHONE, AND NSC NUMBER

(_ _ _) _ _ _ - _ _ _ _ NSC _____

PLACE OF SERVICE ____ REPLACEMENT ITEM ____

NAME AND ADDRESS OF FACILITY IF APPLICABLE (SEE BACK OF FORM):

HCPCS CODE(S) WARRANTY LENGTH TYPE

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

SECTION B CLINICAL INFORMATION

DIAGNOSIS (ICD9): _____ _____ _____ _____

PT. HT. ____ (IN.) PT. WT. ____ (LBS) DOB ____/____/____

I LAST EXAMINED THIS PATIENT FOR THIS CONDITION ON: _____/_____/_____ PT. SEX ____ (M OR F)

DATE NEEDED INIT ____/____/____ REV/RECERT ____/____/____

EST. LENGTH OF NEED: # OF MONTHS: ____ 1-99 (99 = LIFETIME)

ANSWER QUESTIONS 1-6 FOR PARENTERAL, ANSWER 2, 6-15 FOR ENTERAL **Use Y - Yes, N - No or D for Does Not Apply unless otherwise noted.**

[ ] 1. Does the patient have severe permanent disease of the gastrointestinal tract which prevents absorption of sufficient nutrients to maintain weight and strength commensurate with the patient's overall health status?

[ ] 2. Do the number of calories prescribed average 20-35 cal/kg/day?

[ ] 3. Days per week infused? Enter 1-7.

4. Formula components:

Amino acid _____(ml/day) _____ concen % _____ gms protein/day

Dextrose_____ (ml/day) _____ concen %

Lipids _____ ml/day _____ days/week _____ concen %

[ ] 5. What is the route of administration?
1 - Central line
2 - Peripheral line
3 - Hemodialysis access line
7 - Peripherally inserted central catheter (PICC)

[ ] 6. Has there been a break in therapy of two or more consecutive months, necessitating a new certification, during which time the patient did not receive enteral or parenteral feeding?

[ ] 7. Does the patient have permanent nonfunction or disease of the structures that normally permit food to reach the small bowel?

[ ] 8. Does the patient require tube feedings to provide sufficient nutrients to maintain weight and strength commensurate with the patient's overall health status?

[ ] 9. What is the prescribed route of administration?
4 - Nasogastric tube
5 - Gastrostomy tube
6 - Jejunostomy tube

10. Product name? _____

11. Calories per day? _____

[ ] 12. Days per week administered? Enter 1-7.

[ ] 13. Method of administration?
1 - Syringe
2 - Gravity
3 - Pump

[ ] 14. Does the patient have a documented allergy or intolerance to semi-synthetic nutrients?

15. Additional information when required by policy:

_____

_____

_____

I certify the medical necessity of these items for this patient. Section B of this form and any statement on my letterhead attached hereto has been completed by me or reviewed by me. The foregoing information is true, accurate, and complete, and I understand that any falsification, omission, or concealment of material fact may subject me to civil or criminal liability.

PHYSICIAN NAME, ADDRESS

_____ __/__/__

PHYSICIAN'S SIGNATURE: DATE
(A STAMPED SIGNATURE IS NOT ACCEPTABLE)

☐ Attending ☐ Consulting ☐ Other ordering

UPIN: _____

TELEPHONE #: (_ _ _) _ _ _ - _ _ _ _

08/16/93

SECTION A: (To be completed by the supplier)

CERTIFICATION TYPE:	Check the appropriate box to indicate if this CMN is the initial certification, revised certification, or recertification. Refer to your supplier manual for more information.
BENEFICIARY INFORMATION:	Indicate the beneficiary's name, permanent legal address, telephone number and his/her health insurance claim number (HICN) as it appears on the beneficiary's Medicare card and on your claim form.
PLACE OF SERVICE:	Indicate the place in which the item is being used, i.e., patient's home is 12, skilled nursing facility (SNF) is 31, End Stage Renal Disease (ESRD) facility is 65, etc. Refer to your supplier manual for a complete index.
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SECTION B: (To be completed or reviewed and signed by the ordering physician)

DIAGNOSIS:	In the first space, list the ICD9 code that represents the primary reason for ordering this item. List any additional ICD9 codes that would further describe the medical need for the item (up to 3).
EXAMINATION DATE:	Indicate the date (MM/DD/YY) the patient was last seen by the ordering physician prior to the beginning of this certification period.
PT. HT., PT. WT., DOB:	Indicate the patient's height in inches and weight in pounds. Indicate patient's date of birth (MM/DD/YY).
DATE NEEDED:	Indicate the date (MM/DD/YY) the ordered item was initially needed outside the hospital setting. If this certification is a revised certification, also indicate the effective date of the order change.
EST. LENGTH OF NEED:	Indicate the estimated length of need (the length of time the physician expects the patient to require use of the ordered item) by filling in the appropriate number of months. If the physician expects that the patient will require the item for the duration of his/her life, then enter 99.
QUESTION SECTION:	This section is used to gather clinical information to determine medical necessity. Answer each question within the category for the items ordered, using "Y" for yes, "N" for no, and "D" for does not apply, unless otherwise noted.
PHYSICIAN INFORMATION:	The physician's signature certifies that the item ordered is medically necessary for this patient and that section B was completed or reviewed by the physician. This form must be signed and dated by the physician. Signature and date stamps are not acceptable. The physician must indicate whether he/she is the attending, consulting or other ordering physician by putting a check mark in the appropriate box. Indicate other ordering when you are neither the attending or consulting physician. Refer to your supplier manual for more information.
PHYSICIAN NAME, ADDRESS:	Indicate physician's name and complete mailing address.
UPIN:	The physician must indicate his/her Unique Physician Identification Number (UPIN).
PHYSICIAN'S TELEPHONE NO:	The physician must give a telephone number where he/she can be contacted (preferably a number where records would be accessible pertaining to this patient) if more information is needed.

Department of Health and Human Services
Health Care Financing Administration

Form Approved
OMB No. 0938-0534

ATTENDING PHYSICIAN'S CERTIFICATION OF MEDICAL NECESSITY FOR HOME OXYGEN THERAPY *(Legible handwritten entries acceptable)*

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to HCFA, P.O. Box 26684, Baltimore, MD 21207; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

Patient's Name, Address, and HIC No.	Supplier's Name, Address, and Identification No.

Certification: ☐ Initial ☐ Revised ☐ Renewed

INFORMATION BELOW TO BE ENTERED ONLY BY PHYSICIAN OR PHYSICIAN'S EMPLOYEE

1. Pertinent Diagnoses, ICD-9-CM Codes, and Findings - CHECK ALL THAT APPLY:

☐ Emphysema (492.8)
☐ COPD (496)
☐ Cor Pulmonale (416.9)
☐ Interstitial Disease (515)
☐ Other _____ (Specify) _____ (Code)
☐ Chronic Obstructive Bronchitis (491.2)
☐ Chronic Obstructive Asthma (493.20)
☐ Congestive Heart Failure (428.0)
☐ Secondary Polycythemia (289.0)
☐ Hematocrit 57% or more Yes☐ No☐

2.A. I last examined this patient for this condition on:
_____/_____/_____
Month Day Year

2.B. Home oxygen prescribed:
_____/_____/_____
Month Day Year

2.C. Estimated length of need:
☐1-3 months ☐4-12 months ☐ Lifetime

3.A. Results of Most Recent Arterial Blood Gas and/or Oxygen Saturation Tests (Patient Breathing Room Air)

	PO2	02 Saturation	Date
(1) At Rest			
(2) Walking			
(2) Sleeping			
(3) Exercising			
(4) Other :			

3.C. Physician/Provider Performing Test(s) *(Printed/Typed Name and Address)*:

3.B. If performed under conditions other than room air, explain:

NOTE: If PO2 Level exceeds 59 mm Hg or the arterial blood saturation exceeds 89% at rest on room air, the claim will be disallowed without compelling medical evidence. Check block ☐ if you have attached a separate statement on your letterhead of additional documentation.

4. Oxygen Flow Rate : _____ Liters per minute ☐ Continuous (24 hrs/day)

☐ Noncontinuous (Enter hrs/day): _____ Walking _____ Sleeping _____ Exercise Program _____ Other (specify) _____

5. Oxygen Equipment Prescribed If you have prescribed a particular form of delivery, check applicable block(s). Otherwise leave blank.

A. Supply System

(1) Stationary Source ☐ Concentrator ☐ Liquid Oxygen ☐ Compressed Gas ☐ Other

(2) Portable or Ambulatory Source ☐ Liquid Oxygen ☐ Compressed Gas ☐ Other _____

B. Delivery System

☐ (1) Nasal Cannula
☐ (2) 02 Conserving Device
☐ Pulse 02 System
☐ Reservoir System
☐ Other _____
☐ (3) Transtracheal Catheter
☐ (4) Other _____

6. If you have prescribed a portable or ambulatory system, describe activities/exercise that patient regularly pursues which require this system in the home and which cannot be met by a stationary system (e.g., amount and frequency of ambulation).

CERTIFICATION

THE PATIENT HAS APPROPRIATELY TRIED OTHER TREATMENT MEASURES WITHOUT SUCCESS. OXYGEN THERAPY AND OXYGEN EQUIPMENT AS PRESCRIBED IS MEDICALLY INDICATED AND IS REASONABLE AND NECESSARY FOR THE TREATMENT OF THIS PATIENT. THIS FORM AND ANY STATEMENT ON MY LETTERHEAD ATTACHED HERETO HAS BEEN COMPLETED BY ME, OR BY MY EMPLOYEE AND REVIEWED BY ME. THE FOREGOING INFORMATION IS TRUE, ACCURATE, AND COMPLETE, AND I UNDERSTAND THAT ANY FALSIFICATION, OMISSION, OR CONCEALMENT OF MATERIAL FACT MAY SUBJECT ME TO CIVIL OR CRIMINAL LIABILITY.

Attending Physician's Signature: *(A STAMPED SIGNATURE IS NOT ACCEPTABLE)*	Date:

Physician's Name, Address, Telephone No., and Identification No.:

Form HCFA-484 (5-90)

YOCON®
YOHIMBINE HCl

Description: Yohimbine is a 3a-15a-20B-17a-hydroxy Yohimbine-16a-carboxylic acid methyl ester. The alkaloid is found In Rubaceae and related trees. Also in Rauwolfia Serpentina (L) Benth. Yohimbine is an indolalkylamine alkaloid with chemical similarity to reserpine. It is a crystalline powder, odorless. Each compressed tablet contains (1/12 gr.) 5.4 mg of Yohimbine Hydrochloride.

Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalmic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon® is indicated as a sympathicolytic and mydriatic. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.[1,2] Also dizziness, headache, skin flushing reported when used orally.[1,3]

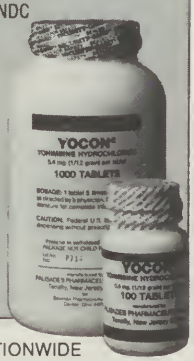
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.[1,3,4] 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to ½ tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.[3]

How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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Should the Auxiliary become the Alliance?

As the gavel closed the 1993 AMAA (American Medical Association Auxiliary) House of Delegates meeting in Chicago on June 15, a new era began in the life of the 70-year-old organization. "Auxiliary" was out and "Alliance" was in. Excitement ran high as a staff member changed the logo on the podium to reflect the bylaws amendment making the new title official. In and of itself, it was a simple act. Its implication, however, was enormous, as it represented almost a decade of debate between two strong factions, each of which had no problem in justifying its side of the name change issue.

Dissatisfaction with the name "auxiliary" did not emerge from a vacuum. It was synchronized with the changing roles of women in society, the growing number of male spouses in the Auxiliary, and the gradual decline in Auxiliary membership. What began as a trickle in casual conversation became a groundswell of serious discussion and debate among young and old members, male spouses, career women, and physicians. "What's in a name?" was no longer an inconsequential question. Every level of the organization was echoing the same concern, and national Auxiliary leaders could ignore it no longer. From the board of directors to the Long-Range Planning Committee to a special committee guided by professional strategic planners to the Bylaws Committee and back to the board of directors and on to the House of Delegates, the auxiliary/alliance question provoked thought and debate. In the final analysis, it might well have been the definitions of the two words themselves that turned the tide in favor of change.

In its study, the special committee carefully analyzed the definition of "auxiliary." As an adjective, it means "offering or providing help; functioning in a subsidiary capacity; supplementary." However, as a noun, the form in which it is used in the AMAA, "auxiliary" is defined by *Webster's Ninth New Collegiate Dictionary* as "an auxiliary person, group, or device, specifically; a member of a foreign force serving a nation at war; an auxiliary boat or ship; an auxiliary verb." "Alliance is defined as "the state of being allied; the action of allying; a bond or connection between families, states, parties, or individuals; an association to further the common interests of the members; union by relationship in qualities: affinity."

Auxilians who were perfectly comfortable with their name reasoned that since the purpose of the organization remained exactly the same, and since they did indeed serve in an auxiliary capacity (that of "offering or providing help"), there was no need for a name change. But proponents argued that in today's society, the term "auxiliary" conjures up the meaning "subsidiary, supplementary capacity." They objected to the perception of the traditional, secondary role of women in a male-dominated organization. To attract younger spouses, professional women, and males, name-change advocates contended that the organization must have a title expressing an equal, proactive role with organized medicine, not one suggesting subordination or subservience. In the end, the majority who voted for the change thought that the word "alliance" better describes what the organization is and does. Along with the new name came a tag line: "Physicians' spouses dedicated to the health of America."

Each issue of *Newsline* lists the new states and counties that have joined the "Alliance" bandwagon. At some point, each of these component organizations made a conscious decision to make its name consistent with the national organization. There is at least one good argument for consistency; it is certainly more convenient. But consistency for the wrong reasons does not justify changing the long-standing name of any organization. It is true that the AMAA is a federated organization made up of state and county components; however, no mandate requires any state or county to follow suit with the AMAA just for the name's sake. Perception of the organization's function, acceptance by its membership, compliance with the demands and wishes of the state/local medical societies—all are considerations that any state or county must take into account when making its decision about the name change. Convenience notwithstanding, the national organization understands and respects the decisions each individual organization makes.

According to Dadie Perlov, president of the Consensus Management Group and an expert on organizational management, "The new name is another tool that the organization has to promote itself and, more importantly, to promote its purpose.... This offers your organization a unique chance to grow—through membership and through strengthened partnerships with the medical society and within the community." She went on to point out, however, that "the bottom line is that a

person makes a membership decision in direct response to whether the organization delivers what he or she needs, wants, and expects, no matter what it calls itself."

Although Marylanders from the mountains of Allegany County to the eastern shores of Wicomico County have had their share of debates on the pros and cons of the issue, there has been no official consensus. Now is the time for the Auxiliary to the Medical and Chirurgical Faculty of Maryland to make its own decision. To do nothing is to maintain the *status quo*. Perhaps that is exactly what the majority of state members wish to do. To bring the issue to vote, however, is to make a conscious choice.

At its winter meeting in February, the state board of directors will make a recommendation regarding the name change. The recommendation will be brought before the House of Delegates for a final vote at its May 13 meeting. Since each delegate represents one of the 13 organized counties, it is imperative that these representatives know what their constituents think. Members of the state board of directors, all of whom are voting members in the House of Delegates, also need to know the wishes of state members. To make a decision representing the views of the majority of its members, President Georgia Lizas has requested that county members talk to their delegates and send in the questionnaire at the end of this article.

Auxiliary to the Medical and Chirurgical Faculty of Maryland is a proud and prominent name. It has served us well since 1949. (Just for the record, it is the longest of any state's title, and changing "auxiliary" to "alliance" would not alter that distinction.) "A rose by any other name may smell as sweet," but someone must take responsibility for keeping the same rose or changing its tag. Springtime will tell how blooms our rose.

MARY M. STRAUSS ■

Name change survey

Name_____*(optional)*

County_____

_____I am in favor of retaining the name "auxiliary."

_____I am in favor of changing the name to "alliance."

Comments_____

_____

_____

_____

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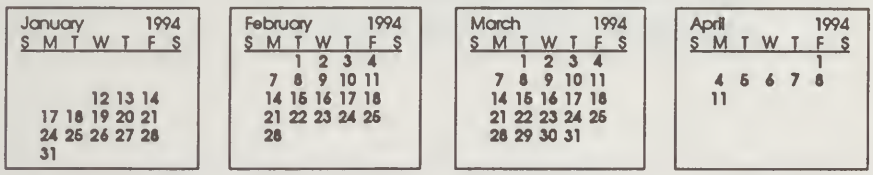
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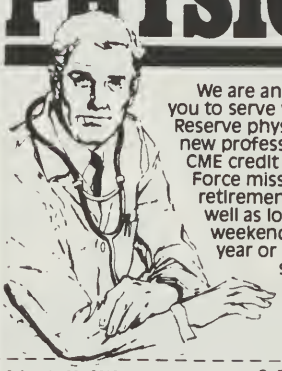
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Med Chi Bicentennial Celebrations

Med Chi has already begun planning celebration activities for its bicentennial in 1999. If you have ideas or suggestions, please call Margaret Burri or Vivian Smith at 410-539-0872 or 1-800-492-1056.

American Medical Association
Physicians dedicated to the health of America

For Your Benefit

AMA brings physicians' system reform concerns to Washington

The AMA continues to work with the Clinton administration and Congress to be sure health system reform preserves the physician-patient relationship. Since introducing the Health Access America proposal in 1990, the AMA has been at the forefront of the health system reform debate.

Many basic principles of Health Access America are mirrored in Clinton's proposal: universal coverage, a national package of health benefits emphasizing preventive care, an employer mandate and insurance reform.

"Both plans seek to build on what already works in health care, and both would make certain that the health care system works fairly for all Americans," said AMA Executive Vice President James S. Todd, MD, in testimony before the Senate Labor and Human Resources Committee.

Dr. Todd also took the opportunity to express concern that the plan does not include "the necessary level of physician participation on behalf of patients."

In testimony before the House Committee on Energy and Commerce, AMA Chair Lonnie R. Bristow, MD, detailed the AMA's differences with the Clinton proposal.

Complicated levels of government regulations built into Clinton's plan cause concern. Dr. Bristow said such levels will add new layers of bureaucracy through the proposed national health board and state-run health facilities.

The plan does not go far enough to limit medical liability costs through caps on non-economic damages and meaningful limits on attorney fees, Dr. Bristow said. More antitrust relief also is needed to allow physicians to adequately negotiate with large managed care organizations.

Dr. Bristow rejected the rigid budget caps and targets in Clinton's plan. Instead, he suggested developing prospective growth targets that establish flexible spending goals for the health care sector of the economy. These goals would identify specific cost difficulties and solutions. Targets would also allow for meaningful negotiations between physicians and the government.

Dr. Bristow expressed medicine's concern over Clinton's intent to regulate the percentage of physicians in primary care to 50 percent and to control allocation of residency slots.

The AMA's litmus test for the Clinton reform legislation consists of only two questions: Will patients have the freedom to obtain care from the provider and facility of their choice? And, can physicians provide necessary, effective and efficient care without undue restrictions on their clinical judgment?

Prepared by the AMA Department of Communications Services. For information, call 800 AMA-3211, ext. 4416.

Fund-raising begins for new Physicians Health Foundation

A mass mailing has been sent to all AMA members and nonmembers requesting donations to fund the Association's newly established Physicians Health Foundation.

The new foundation, developed to provide economic assistance and retraining to disabled and unemployed physicians, will conduct a similar fund-raising campaign each year.

Physicians Health Foundation will work closely with state medical society-sponsored physician assistance programs, which actively will seek out and identify impaired or disabled physicians who need assistance.

Donations will provide economic help to disabled physicians until they are able to return to work or find other means of financial assistance.

The funds also will support and develop retraining programs for disabled physicians and expand on the AMA's current career placement service.

To make a donation, write AMA Physicians Health Foundation, Floor 8, AMA, 515 N. State St., Chicago, Ill. 60610. For more information, call Jean Owens, (800) 621-3211, ext. 5066.

AMA speakers bureau offers health system reform updates

Physicians and health policy professionals are available to deliver presentations through the AMA's Health System Reform Speakers Bureau.

The AMA speakers bureau has been established to strengthen and enhance organized medicine's health system reform position by giving presentations on reform to state and local medical communities as well as to the public.

AMA speakers are reaching numerous physicians and citizens across the nation, providing health system reform updates and explaining how each can help influence the reform process at the grass roots level.

The bureau also provides physicians with prepared speeches, talking points and other materials to help them with their own local presentations on health system reform.

For information on the AMA's speakers bureau or to schedule a speaker, call Marcia Moore, (800) 621-3211, ext. 4710.

HCFA responds to AMA, revises Medicare policy

Responding to concerns expressed by the AMA and other physician organizations, HCFA revised its policy to allow physicians to bill patients for noncovered visit services provided as part of routine physical exams.

Although Medicare does not cover routine physical exams, physicians were able to bill patients at regular fees for these services prior to May 1992. HCFA then revised its policy so physicians could not divide the visit into covered and noncovered portions.

The new policy, effective Oct. 30, enables physicians to bill Medicare for covered visit services. Payment is the lesser of the physician's actual charge or the Medicare-approved amount, if the physician accepts assignment. If assignment is not accepted, payment is the lesser of the actual charge or limiting charge.

The physician's charge to the patient for the noncovered portion of the E/M service is the difference between the physician's usual fee for a routine physical exam and the usual fee (not the Medicare-allowed amount) for the covered visit.

For information, call the AMA Dept. of Health Care Financing, (800) 262-3211, ext. 4514.

Prepared by the AMA Department of Communications Services. For information, call 800 AMA-3211, ext. 4416.

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PHYSICIAN PLACEMENT SERVICE

The Medical and Chirurgical Faculty of Maryland maintains a Placement Service for the convenience of Maryland physicians, hospitals, and communities in search of candidates for positions available in our state. A detailed description of such opportunities should be forwarded to:

Physician Placement Service
1211 Cathedral Street
Baltimore, MD 21201
410-539-0872
1-800-492-1056

Physicians wishing to locate in Maryland are invited to submit a résumé to be kept on file with the Physician Placement Service. Candidates are requested to inform the Faculty when they are no longer available for consideration opportunities in Maryland.

MMJ announcements for physician placements in the classified advertisements are charged at the regular classified advertising rate.

Information for AUTHORS

The Maryland Medical Journal (MMJ) *is a monthly publication of the Medical and Chirurgical Faculty of Maryland. The journal's goals are educational and informative: the publishing of scientific articles (original research, case studies, and review articles) and other technical information, as well as editorials, letters, special articles (evaluations, position papers, reviews of nonscientific subjects), membership and legislative news, continuing medical education notices, and programs and policies of the faculty.*

- ***Letter of transmittal***—The letter of transmittal, which all authors must sign, should include the full names, degrees, titles, and affiliations of all authors, and the name, address, and phone number of the author to whom reprint requests and correspondence should be sent.

  The letter should include a statement to the effect that all authors have participated in the conception and design of the work and in the writing of the manuscript, and that they take public responsibility for it. The authors should attest to the validity and legitimacy of the data, and acknowledge that they have reviewed the final version of the manuscript and approve it for publication.

  In addition, the letter must include a paragraph that transfers copyright ownership to the *MMJ* in the event that the work is published.

- ***Manuscript preparation***—Manuscripts should be submitted to Editor, *MMJ*, 1211 Cathedral Street, Baltimore, MD 21201-5585. Manuscripts must be original material not previously published and not under consideration by another publication. An abstract of 100 to 300 words is required.

  All material, including references, tables, and legends, must be double-spaced. Pages should be numbered. (All abbreviations should be spelled out on first use.) The original manuscript plus one copy should be submitted on standard (8.5" x 11") bond paper. If at all possible, an IBM-compatible disk should be included, with the manuscript entered in a WordPerfect, Multimate, Wordstar, or ASCII format; the transmittal letter should identify the format used.

- ***References***—References are limited to those citations noted in the text. References should be numbered consecutively as they appear in the text and should be kept to a minimum (fewer than thirty-five). Personal communications and unpublished data are not acceptable. At a minimum, references should include names of all authors, complete title of the article cited, name of journal abbreviated according to *Index Medicus* (if abbreviation is not known, journal name should be spelled out fully), year of publication, volume number, and first and last page numbers. Sample references are as follows:

  1. Stevens MB. The clinical spectrum of SLE. Md Med J 1991; 10:875–85.
  2. Ropes MW. Characteristics, manifestations, and pathologic findings. In: Ropes MD, ed. Systemic Lupus Erythematosus. Cambridge, MA: Harvard University Press. 1976; 50–4.

- ***Tables***—Tables should be typed on separate sheets of paper, be numbered, and have a brief descriptive title. Data presented in tables should be self-explanatory and should supplement, not duplicate, the text; the Editor reserves the right to edit tables. Authors should be sure that statistics are consistent in both tables and text.

- ***Illustrations***—Illustrations include material that cannot be set in type. Photographic material must be submitted as high-contrast, glossy prints. Drawings and graphs must be done professionally in india ink on high-grade white drawing paper or be computer generated. Identification—including figure number, the title of manuscript, the name of corresponding author, and arrow indicating top—should be typed on a gummed label and affixed to the back of each illustration. Legends for illustrations should be typed on a separate page with numbers corresponding to those on the photographs or drawings. Recognizable photographs of patients are to be masked and should carry with them written permission for publication. Cost of printing color photographs must be borne by the author.

Checklist

- ☐ Original manuscript and one copy.
- ☐ IBM-compatable disk in WordPerfect, Multimate, Wordstar, or ASCII.
- ☐ Everything double-spaced.
- ☐ Letter of transmittal, signed by all authors, that includes release of copyright, statement of authorship responsibility, title and affiliation of all authors, and identification and phone number of corresponding author.
- ☐ Abstract of 100 to 300 words.
- ☐ Permission-to-borrow letters for any previously published illustrations or tables

- ***Permissions***—Material taken from other sources must be accompanied by written permission from both author(s) and publisher allowing the *MMJ* to reproduce the information/figure.

- ***Editorial responsibility***—All manuscripts are acknowledged upon receipt. They are subject to peer review by an editorial board and, at times, by guest reviewers in appropriate fields of medicine, to determine the originality, validity, and importance of the content and conclusions. Authors are usually notified of the status of their papers (acceptance, revision, or rejection) within 4 to 8 weeks of receipt; however, longer delays are sometimes unavoidable. Reviewers' comments will be returned with rejected manuscripts at the discretion of the Editor. All guest reviewers will remain anonymous.

  Accepted manuscripts become the permanent property of the *MMJ* and are subject to copy editing. (The *Chicago Manual of Style* and the unabridged *Random House Dictionary of the English Language* are used as style guides.) The corresponding author is sent a reprint order form and galley proofs. S(he) then has 48 hours in which to make minor changes and clear all corrections and changes with co-authors; if proofs are not returned by the specified date, they will be considered approved as typeset. ■

University of Maryland

For each course, additional information may be obtained by contacting the Program of Continuing Education, University of Maryland School of Medicine, Room 14-011, BRB, 655 W. Baltimore St., Baltimore, Maryland 21201 (410-328-3956) or by calling the phone number listed after a specific program. FAX 410-328-3103.

R. Adams Cowley 16th annual national trauma symposium, at the Hyatt Regency, Baltimore, Maryland. Info: 410-328-2399. **Nov. 16–20, 1994**

Miscellaneous meetings

Cardiac auscultation for physician assistants, nurse practitioners, and cardiac nurses, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 800-257-4737. **Dec. 1–3**

The 26th annual New York cardiovascular symposium, sponsored by the American College of Cardiology. Info: 800-257-4739. **Dec. 2–4**

Fourth annual maternal and child health update, cosponsored by the Maryland Department of Health and Mental Hygiene, Local and Family Health Administration, Office of Maternal Health and Family Planning, and Maryland Coalition for Healthy Mothers and Healthy Babies, at the University of Maryland College Park Adult Education Center, College Park, Maryland. Info: 410-225-6726. **Dec. 3**

Twenty-first annual Williamsburg conference on heart disease, sponsored by the American College of Cardiology, in Williamsburg, Virginia. 19 Cat 1 AMA/PRA credits. Info: 800-257-4739. **Dec. 5–8**

Interpretation and treatment of cardiac arrhythmias, sponsored by the American College of Cardiology, in Philadelphia, Pennsylvania. Info: 800-257-4739. **Dec. 6–8**

Advanced echocardiography: Case studies and concepts, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 800-257-4737. **Dec. 13–15**

The role of echocardiography/Doppler in clinical decision making, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 800-257-4737. **Jan. 10–12**

Molecular biology for the cardiologist, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 1-800-257-4737. **Jan. 19–21**

Second annual mid-winter conference, sponsored by the Maryland Academy of Family Physicians, in Rockville, Maryland. 10 Cat 1 AMA/PRA credits; 10 AAFP prescribed hours. Fee: $100 members; $150 nonmembers; $65 paramedicals; no charge for residents, medical students, MAFP retired and life members. Info: William P. Jones, M.D., 410-747-1980. **Jan. 22–23**

The trials of cardiology, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 800-257-4737. **Jan. 24–26**

Cardiovascular conference at Snowshoe, sponsored by the American College of Cardiology, in Snowshoe, West Virginia. 15.5 Cat 1 AMA/PRA credits. Info: 800-257-4739. **Jan. 31–Feb. 2**

The cardiac cath lab of the 90s: preparing for the future, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 800-257-4737. **Jan. 31–Feb. 2**

Miscellaneous Meetings (continued)

Therapeutic approach to osteoporosis, sponsored by the Baltimore City Medical Society, at Children's Hospital, Baltimore, Maryland. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-652-0022. — **Feb. 3**

Advanced clinical cardiac electrophysiology, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 800-257-4737. — **Feb. 9–11**

Advanced pediatric cardiac ultrasound, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 800-257-4737. — **Feb. 16–18**

Update on management of adult HIV, sponsored by the Baltimore City Medical Society, at Union Memorial Hospital, Baltimore, Maryland. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-652-0022. — **Mar. 3**

30th annual scientific day—Our patients suffer from reminiscences: memory and its role in clinical work, at Sheppard Pratt Conference Center, Baltimore, Maryland. 6.25 Cat 1 AMA/PRA credits. Fee: TBA. Info: 410-938-4598. — **Mar. 12**

Ultrasound in abdominal surgery, at the George Washington University Medical Center, Washington, DC. Info: Maria Gorrick, 202-994-1791. — **Mar. 18**

Echocardiography for the sonographer, sponsored by the American College of Cardiology, at the Heart House Learning Center, Bethesda, Maryland. Info: 800-257-4737. — **Mar. 24–26**

Round table discussion with Monumental City Medical Society, at Liberty Medical Center, Baltimore, Maryland. 1 Cat 1 AMA/PRA credit. Fee: none. Info: 410-652-0022. — **Apr. 7**

Clinical psychopharmacology: review and update—1994, at Sheppard Pratt Conference Center, Baltimore, Maryland. 6.25 Cat 1 AMA/PRA credits. Fee: TBA. Info: 410-938-4598. — **Apr. 22–23**

46th annual meeting and scientific session, sponsored by the Maryland Academy of Family Physicians, in Ocean City, Maryland. 41.25 Cat 1 AMA/PRA credits; 41.25 AAFP prescribed hours. Fee: $240 members; $275 nonmembers; $135 paramedicals; no charge for residents, medical students, MAFP retired and life members. Info: Richard Colgan, M.D., 410-747-1980. — **May 10–15**

Clinical auscultation of the heart, sponsored by the American College of Cardiology, Washington, DC, Info: 800-257-4739. — **May 11–13**

Med Chi's 1994 Annual Meeting, at the Ramada Convention Center, Hagerstown, Maryland. Cat 1 AMA/PRA credits available. Fee: none for Med Chi members. Info: Ruth Seaby, 410-539-0872 or 800-492-1056. — **May 12–14**

Continuously throughout the year

Fluorescein angiography conference, sponsored by the Retina Center, St. Joseph Hospital, Baltimore, Maryland, first and third Mondays of each month; 8:00–9:00 a.m. Fee: none. Info: R. Classon, 410-337-4500.

Shady Grove Adventist Hospital

9901 Medical Center Drive, Rockville, Maryland. Info: 301-279-6115.

Malpractice update	**Dec. 2**
Repetitive motion disorders	**Dec. 9**
Sorting it all out	**Dec. 16**

The Johns Hopkins Medical Institutions

All courses at the Thomas B. Turner Building unless otherwise indicated. For information on continuing medical education activities, contact the Office of Continuing Education, 720 Rutland Ave., Baltimore, Maryland 21205 (410-955-2959).

Neurology for the primary practitioner. 6 Cat 1 AMA/PRA credits; 6 AAFP prescribed hours. Fee: $125 physicians; $75 residents, fellows, and allied health professionals. — **Dec. 11**

Excimer laser with lab workshop. Fee: none. — **Dec. 11**

Radial keratotomy wet lab workshop. Fee: none. — **Dec. 11**

Basic endoscopic sinus surgery. 19 Cat 1 AMA/PRA credits: lab and lectures only; 14.5 Cat 1 AMA/PRA credits: lectures only. Fee: $1,250 labs and lectures; $295 lectures only. — **Jan. 6–7**

Advanced endoscopic sinus surgery. 9 Cat 1 AMA/PRA credits: labs and lectures; 6 Cat 1 AMA/PRA credits: lectures only. Fee: $1,050 labs and lectures; $295 lectures only. — **Jan. 8**

Advances in cardiac diagnosis and treatment 1994. Cat 1 AMA/PRA credits available. Fee: TBA. — **Jan. 20–21**

1994 update in the management of age-related macular degeneration (optional fluorescein angiography workshop). 8.5 Cat 1 AMA/PRA credits: one-day course; 15.5 Cat 1 AMA/PRA credits: two-day course. Fee: $225 physicians; $100 residents, fellows, and allied health professionals; $550 lectures and optional lab course. — **Jan. 21–22**

Geriatrics symposium: 1994 a board review. 37.25 Cat 1 AMA/PRA credits. Fee: $595. — **Jan. 24–28**

The cycle of sexual trauma: Treating the victim and treating the offender. 18 Cat 1 AMA/PRA credits. Fee: $300 physicians; $275 groups of three or more on one check or credit card. — **Feb. 10–12**

PET and SPECT imaging in oncology. 16 Cat 1 AMA/PRA credits. Fee: $495 physicians; $395 residents, fellows, and allied health professionals. — **Mar. 9–12**

Diagnosis and treatment of neoplastic disorders. 14.5 Cat 1 AMA/PRA credits. Fee: $300 before Feb. 1; $325 after Feb. 1; $150 residents, fellows, and allied health professionals. — **Apr. 7–8**

Clinical care of the patient with HIV infection. 13 Cat 1 AMA/PRA credits; 12.75 AAFP credits. Fee: $325 physicians; $165 residents, fellows, and allied health professionals. — **Apr. 7–8**

21st annual pediatric trends. 41 Cat 1 AMA /PRA credits. Fee: $650 physicians; $450 residents and fellows. — **Apr. 11–16**

Basic concepts in dysphagia diagnosis and management. Cat 1 AMA/PRA credits available. Fee: $175 physicians; $100 residents and allied health professionals. — **Apr. 13**

Fifth multidisciplinary symposium on dysphagia. Cat 1 AMA/PRA credits. Fee: $400 physicians; $225 residents and allied health professionals. — **Apr. 14–15**

Biological response to orthopaedic implants. 12 Cat 1 AMA/PRA credits. Fee: $225 physicians; $125 residents and fellows. — **Apr. 15–16**

Second symposium on the prevention of developmental disabilities in infants and toddlers. 14 Cat 1 AMA/PRA credits. Fee: $200 physicians; $100 residents, fellows, and allied health professionals. — **Apr. 18–19**

International conference on crystalline silica health effects: current state-of-the-art. Fee: $450. — **Apr. 18–20**

The Johns Hopkins Medical Institutions (continued)

35th annual postgraduate institute for pathologists in clinical cytopathology. Course A (home study). Preparation for Course B. — **Mar.–Apr.**

35th annual postgraduate institute for pathologists in clinical cytopathology. Course B. 136 Cat 1 AMA/PRA credits. — **Apr. 18–29**

Pediatric allergy and immunology for the practitioner. Cat 1 AMA/PRA credits available. Fee: TBA. — **May 5–6**

Phototherapy and photochemotherapy. 10 Cat 1 AMA/PRA credits. Fee: $250 physicians; $200 nurses and technicians; $150 residents and fellows. — **May 6–7**

Advanced pediatric life support courses. 20 Cat 1 AMA/PRA credits; 18.5 AAFP prescribed hours; 20 AAP credit hours; 17 ACEP Cat 1 credits. Fee: $525. — **June 13–15**

Advances in orthopaedic biomechanics and their clinical applications. 19 Cat 1 AMA/PRA credits. Fee: $250 pre-symposium workshop; $450 symposium; $250 residents and full-time students. — **Oct. 27–30**

Continuously throughout the year

Visiting preceptorship in pediatric critical care medicine. Ongoing five-day preceptorship by appointment. 40 Cat 1 AMA/PRA credits. Fee: $600.

The department of radiology and radiological sciences offers several courses in abdominal and obstetrical ultrasound. Info: P. Williams, 410-955-3169.

Visiting physicians. Offered throughout the year for experience in the lab and participation in read-in sessions; by appointment only. 40 Cat 1 AMA/PRA credits. Fee: $500.

Johns Hopkins medical grand rounds. Accredited audiovisual continuing education series of case discussions for clinicians; 30 topics per year in five bimonthly programs. Individual and group subscriptions. 40 Cat 1 AMA/PRA credits. Info: 410-955-3988.

Johns Hopkins sports medicine grand rounds. Accredited continuing education series of case discussions by a different presenter on the first Thursday of each month. Info: Carol Kelly, 410-383-0600.

PHYSICIAN'S RECOGNITION AWARD

During November 1993, the physicians listed below received the American Medical Association (AMA) Physician's Recognition Award. Established in 1968, the award's purpose is to encourage physician participation in continuing medical education and to recognize those physicians who have voluntarily completed programs of continuing medical education.

Robert Allen Blum, M.D.
Steven Arthur Burka, M.D.
Wilhelmina G. Camina, M.D.
Franklyn William Colligan, M.D.
George Travers Gilmore, M.D.
Perry Hookman, M.D.
Robert Charles Karlsberg, M.D.
J. Jon C. Mariano, M.D.
Andris Neimanis, M.D.
Ronald Nevin Shore, M.D.
Mohammad Far Taleghani, M.D.
Kae Strosnider Yingling, M.D.
Evelina Yunan, M.D.

William Donald Schaefer - Governor of Maryland

DHMH Maryland Department of Health & Mental Hygiene

Nelson J. Sabatini - Secretary
Department of Health & Mental Hygiene

J. Mehsen Joseph, PhD - Director
Community Health Surveillance & Laboratories Admin

Ebenezer Israel, MD, MPH- Director
Epidemiology & Disease Control Program

EPIDEMIOLOGY & DISEASE CONTROL PROGRAM
201 W. Preston Street, Baltimore, Maryland 21201 (410)225-6700

Chronic Disease in Maryland: Lung Cancer and Smoking

December, 1993

This is the first of two articles about chronic disease in Maryland. This article concentrates on lung cancer and smoking. The second article will focus on cardiovascular diseases and will be published in next month's newsletter.

Introduction

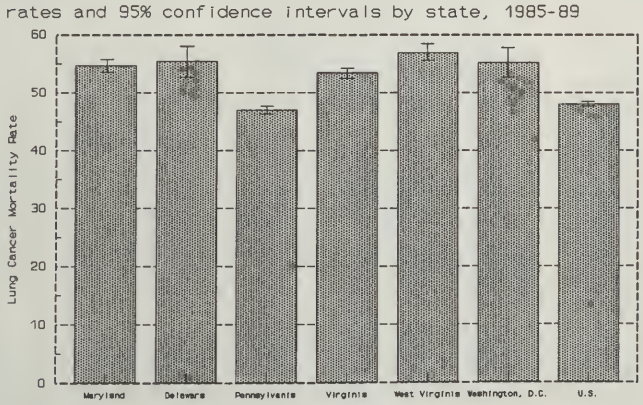
Eighty to ninety percent of lung cancer mortality in Maryland is caused by cigarette smoking[1,2]. Lung cancer due to smoking is one of the most preventable health problems in Maryland and the nation. President Clinton recently announced his intention to propose a significant increase in the federal excise tax on cigarettes to help pay for national health care reform. Also, Governor Schaefer has expressed a willingness to consider an increase in the state excise tax as a way to discourage tobacco use, in particular among youths. A twenty cent increase in the Maryland excise tax on cigarettes which took effect May 1, 1992, resulted in a significant decrease in smoking rates. However, adolescents, the group thought to be most affected by a tax increase, actually increased cigarette consumption in the months following the increase.

This report summarizes the most recent available lung cancer mortality data, and discusses trends in attitudes and behaviors toward tobacco smoking, especially among adolescents.

Lung Cancer

The average annual age-adjusted mortality rate for lung cancer in Maryland (54.6/100,000 in the period 1985-1989) is similar to the rates for most of the other states in the region[3] (Figure 1); Virginia (53.4/100,000) and Pennsylvania (47.0/100,000) have lower lung cancer mortality. Except Pennsylvania, mortality rates for states in the Mid-Atlantic region are higher than the national average (48.0/100,000).

Figure 1. Average annual age-adjusted lung cancer mortality rates and 95% confidence intervals by state, 1985-89



Rates are per 100,000 and age-adjusted to 1970 U.S. standard population
Source: National Cancer Institute SEER Program

Mortality rates for lung cancer during the same period vary considerably across Maryland (Table 1). The National Capital area (Montgomery and Prince George's counties) has the lowest regional rate (43.6), and Montgomery County has the lowest county rate (37.2) among Maryland's twenty-four local subdivisions. The Baltimore Metro area (Baltimore City and Anne Arundel, Baltimore, Carroll, Harford, and Howard counties) has the highest regional rate (60.2), and Baltimore City the highest of any jurisdiction (70.3).

The northwest area of the state (Allegany, Frederick, Garrett, and Washington counties) also has a lower rate (47.5) than the state as a whole. The two remaining regions in the state, the Southern and Eastern Shore areas, have rates (59.5 and 59.4, respectively) that exceed the statewide rate.

Lung cancer has been a primary concern in Maryland because it is the single largest contributor (25-30%) to our cancer problem, and Maryland ranks ninth nationally in lung cancer mortality. Our high lung cancer death rate is a key contributor to Maryland's current number two ranking in all-causes cancer mortality.

Cigarette Smoking

The single greatest cause of lung cancer is smoking[2]. It is estimated that 82% of all lung cancer cases in the state are attributable to either smoking or second-hand tobacco smoke. Also, people who smoke are at increased risk for respiratory disease and cardiovascular disease[4]. In 1990, 6,579 premature deaths in adults over 20 years old, and 31 premature deaths among infants less than one year old were attributable to smoking[1,5-9] in Maryland.

More than $1.2 billion was spent on smoking related illness, disability, and health care in 1990[1,8] in Maryland. This includes direct physician and nurse care, medications, and lost income and productivity due to illness or death.

Adverse health effects due to smoking can take 20 to 30 years or more to become manifest[3]. Adults who began smoking as teenagers have twice the risk of death due to cancer or heart disease than those who began smoking later in life; the risk is even greater compared to those who never smoked. Fifty and ninety percent of adult smokers have acquired their addiction to tobacco by the time they are 18 and 21, respectively[10]. The longer a person smokes, the greater the risk of illness and premature death. There are also short-term effects among the children of women who smoke during and after pregnancy, including low birth weight, sudden infant death syndrome, allergies, and upper respiratory infections[4].

The message that smoking adversely affects health is reaching the public. In recent years, smoking rates have been decreasing among all persons 20 years of age and older[6] (Figure 2); from 1989 through 1991, 23% of adults were currently smoking. The opposite is occurring among youths less than 20 years old[11]. If the current trends continue, more than 40% of students in grade twelve will be smoking in the year 2000 (Figure 2).

In May 1992, Maryland increased its excise tax on cigarettes to thirty-six cents per pack, up twenty cents from the previous level. This increase resulted in a reduction in cigarette smoking rates among adults in

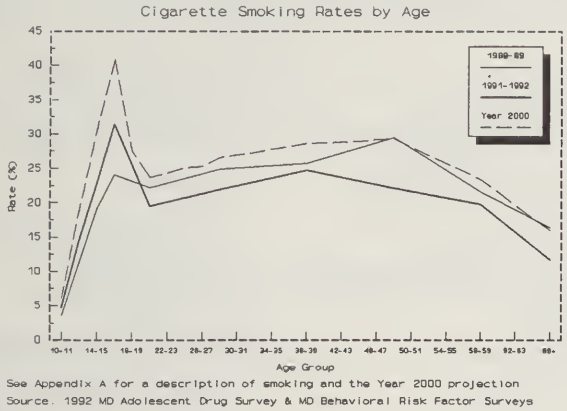
Table 1. Deaths and age-adjusted[1] mortality rates[2] for lung cancer by region, and political subdivision, Maryland, 1985-1989

Area of Residence	Annual Number of Deaths	Lung Cancer Death Rate
Maryland State	2,539	54.6
Northwest Area	199	47.5
Garrett	13	42.5
Allegany	59	49.5
Washington	63	43.8
Frederick	64	51.5
Baltimore Metro Area	1,473	60.2
Baltimore City	615	70.3
Baltimore County	440	53.4
Anne Arundel	236	66.3
Carroll	51	44.7
Howard	49	48.1
Harford	82	59.1
National Capital Area	527	43.6
Montgomery	256	37.2
Prince George's	271	51.9
Southern Area	92	59.5
Calvert	21	52.6
Charles	37	60.6
St. Mary's	34	63.7
Eastern Shore Area	248	59.4
Cecil	41	58.8
Kent	15	53.6
Queen Anne's	18	48.9
Caroline	19	61.7
Talbot	23	54.3
Dorchester	28	63.8
Wicomico	54	64.3
Somerset	22	76.8
Worcester	28	55.6

1 Adjusted to the total U.S. 1970 population by the direct method.

2 Mortality rates per 100,000 population.

Source: Maryland Center for Health Statistics, DHMH



See Appendix A for a description of smoking and the Year 2000 projection
Source: 1992 MD Adolescent Drug Survey & MD Behavioral Risk Factor Surveys

the second half of the year[6]. For adolescents, the rate of smoking increased in the same period[11]. The recent upswing in tobacco use among adolescents will result in an increase in tobacco-related morbidity and mortality as this group ages.

In 1992, 31% of Maryland twelfth-graders were smoking at least once a month; this is an increase of 4% from 1990[11]. Tobacco is used as a "gateway" drug by teenagers; adolescents who smoke are more likely to use other substances, such as alcohol, cocaine, heroin and marijuana.

Many young people are also aware of the adverse health effects of smoking. Eighty-nine percent of twelfth grader students know that tobacco, in any of its forms, is a proven cause of cancer, and 60% believe cigarettes are very dangerous[11]. The problem seems to be two-fold. The first is peer pressure -- there is little one can do about this, because billboards and other advertisements continue to portray smoking as desirable behavior. Second, although the health risks are recognized, there are also beliefs that occasional smoking will do no harm, that smoking for a few years is all right, and that quitting smoking is easy. This latter attitude may be modifiable by an adolescent's physician.

Strategies

The most effective method of lowering lung cancer mortality rates in the future is preventing the uptake of smoking by adolescents and getting those who already smoke to quit. Physicians can be an excellent source of counseling for young people about the risks of smoking. Physician attitudes toward smoking may be subtly reinforced in the office waiting room by subscribing only to magazines which decline tobacco advertising; such journals are listed in appendix B. Also, pharmacists can refuse to sell tobacco products in their pharmacies.

In addition, all citizens can let their legislators know they support strategies, which effectively prevent the initiation or continued use of tobacco products by youth, as follows:

1. Maintain and strengthen knowledge about the adverse health effects of smoking through anti-smoking media campaigns and school-based prevention education in grades K-12.

2. Limit adolescents' access to tobacco products by placing vending machines at sites frequented only by adults, by placing all tobacco products not dispensed by machine behind counters and accessible only by sales clerks, and by eliminating tobacco company promotions which feature free or reduced price tobacco products.

3. Provide regular increases in the cigarette excise tax and establish an excise tax on other tobacco products, including smokeless tobacco.

4. Require tobacco vendor licenses which provide penalties for sales to minors, and strictly enforce existing sales laws.

5. Protect infants, children and adolescents from exposure to second-hand tobacco smoke through the introduction of stronger clean indoor air legislation, regulations, policies and home behavior.

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Appendix A. Smoking Rates and the Year 2000 Projection

Adolescent smoking was defined as any smoking in the last 30 days[11]; adult smoking was defined as "ever smoked 100 cigarettes and smoking now=yes"[6] . The Year 2000 projection based on the state population as of 1992; that is, the projected smoking rate for people 18 or 19 years old in 1992 will be the 26-27 age group in 2000. The projection is calculated from the 1992 rate and the trends from 1988-89 to 1991-92, and assumes the trends among adolescents will not change without external pressure, e.g. an increase in the excise tax, and the trends among adults will not change towards increased smoking.

Appendix B. Journals which do not accept tobacco advertisements

Alaska
American Health
American Heritage
American History Ill.
Analog Science Fiction
Artists Magazine
Asimov's Science Fiction
Audubon
Backpacker
Bicycling
Business Week
Byte
Cat Fancy
Child
Consumer Reports
Cooking Light
Craftworks for the Home
Cricket
Dog Fancy
Flower & Garden
Good Housekeeping
Guideposts
Home Office Computing
Humpty Dumpty
Hunting
Income Opportunities
Jack & Jill
Kid City
Ladybug
Macuser
Macworld
Men's Fitness
Midwest Living
Mother Jones
Muscle & Fitness
Nation's Business
National Geographic
Natural History
New Age Journal
New Yorker
Organic Gardening
Parenting
Parents
Photographic
PC Magazine
PC World
Popular Photography
Popular Woodworking
Practical Homeowner
Prevention
Runner's World
Sail
Saturday Evening Post
Sesame Street
Seventeen
Shape
Skin Diver
Smithsonian
Southern Accents
Sports Afield
Sunset
Teen
3-2-1 Contact
Travel/Holiday
Travel & Leisure
Vegetarian Times
Virtue
Walking
Weight Watchers
Western Outdoors
Women's Sport/Fitness
Workbasket
Workbench
Writer's Digest
Yankee
YM

Source: EBSCO Reception Room Subscription Services

ABNORMALITIES, MULTIPLE

Glasser SA. Zaeri NN. Nisenbaum H. Body stalk deformity in a twin pregnancy: case report and review. 175–78, 1993 Feb.

AGORAPHOBIA

Anonymous. Treatment of panic disorder: summary of the NIH consensus statement. [review]. 306–7, 1993 Mar.

Tourian K. Ross D. Panic disorder: a commentary. 307, 1993 Mar.

ALCOHOLISM

Hitzig P. Combined dopamine and serotonin agonists: a synergistic approach to alcoholism and other addictive behaviors [see comments]. 153–56, 1993 Feb.

Kaplan I. The first recorded case of alcohol abuse—Noah's arcoholism [letter]. 444–45, 1993 May.

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AMNIOCENTESIS

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Anderson WA. A heart rend(er)ing memorial. [letter]. 145, 1993 Feb.

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_____. Medicine and the performing arts. 249–93, 1993 Mar.

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Beilenson PL. Lambropoulos AS. Baltimore City Health Department: 200 years of progress and partnership. 729–34, 1993 Aug.

Bhagavan BS. Graham RR. Van Wesep RA. A 37-year-old man with diabetes mellitus, renal transplant, fever, pulmonary infiltrates, and mental status alterations [clinical conference]. 51–59, 1993 Jan.

Bianco EA. Consent to treatment: application to performing arts medicine. 293–97, 1993 Mar.

BIRTH RATE

Anonymous. Births, infant & maternal deaths, and abortions—Maryland, 1980-1989 June 1993. 616–19, 1993 Jun.

Black G. Bonner N. Maternal and child health services in the Baltimore City Health Department, 1900-1992. 775–78, 1993 Aug.

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BLUE CROSS BLUE SHIELD

Anonymous. Update on Blue Cross and Blue Shield of Maryland [editorial]. 487–89, 1993 May.

Bolen A. Warren N. Physicians and the press: medicine's new image. 201–2, 1993 Feb.

BREAST NEOPLASMS

Martin RE. Breast cancer: a common concern for patients and physicians. 359–61, 1993 Apr.

Swann CA. Fearnow EC. Imaging Case of the Month. Breast carcinoma with halo sign. 495–96, 1993 May

BRUCELLOSIS

Chase HV. The history of brucellosis in Maryland and the District of Columbia. 37–42, 1993 Jan.

Buckley JW. *William Henry Welch.* [book review]. 497–98, 1993 May.

_____. Dinosaurs. [letter]. 974–77, 1993 Oct.

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Gadomski AM. Rubin JD. Cough and cold medicine use in young children: a survey of Maryland pediatricians. 647–50, 1993 Jul.

COMMUNICABLE DISEASE CONTROL

Maryland. Department of Health and Mental Hygiene. Epidemiology and Disease Control Newsletter. Revised regulations on selected communicable diseases. 1167–70, 1993 Nov.

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Olatidoye AG. Baltazar RF. Dipyridamole-thallium stress testing: a local community hospital experience. 663–68, 1993 Jul.

DeAngelis C. Hopkins implements innovative medical school curriculum. 461–66, 1993 May.

DeHoff JB. Baltimore's public health contributions and today's problems. 725–28, 1993 Aug.

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Anonymous. Diagnosis and treatment of depression in late life: summary of the NIH consensus statement. [review] 192–94, 1993 Feb.

DeWeese J. Liu H. Health indicators of substance abuse problems in Baltimore. 751–60, 1993 Aug.

DIABETES MELLITUS

Ladenson PW. Mersey JH. Diabetes and thyroid disease. 391–92, 1993 Apr.

DIABETIC NEUROPATHIES

Myerson M. Mersey JH. Foot care for the patient with diabetes. 301, 1993 Mar.

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Gershen B. What's a Felty? 1135–37, 1993 Nov.

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Committee on Drugs. 866, 1993 Sept.

Committee on Emergency Medical Services. 867, 1993 Sept.

Committee on Hospital Medical Staffs. 869, 1993 Sept.

Committee on Long-term Care and Geriatrics. 883, 1993 Sept.

Committee on Managed Care and Third-Party Liaison. 883, 1993 Sept.

Committee on Medicine and Religion. 891, 1993 Sept.

Committee on Medicine and the Performing Arts. 890, 1993 Sept.

Committee on Mental Health. 892, 1993 Sept.

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Infant, Child, and Adolescent Health Subcommittee. 871, 1993 Sept.

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Liaison Committee with the Medical Assistance Program. 888, 1993 Sept.

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Maryland Medical Journal Editorial Board. 885, 1993 Sept.

Maternal Welfare Subcommittee. 886, 1993 Sept.

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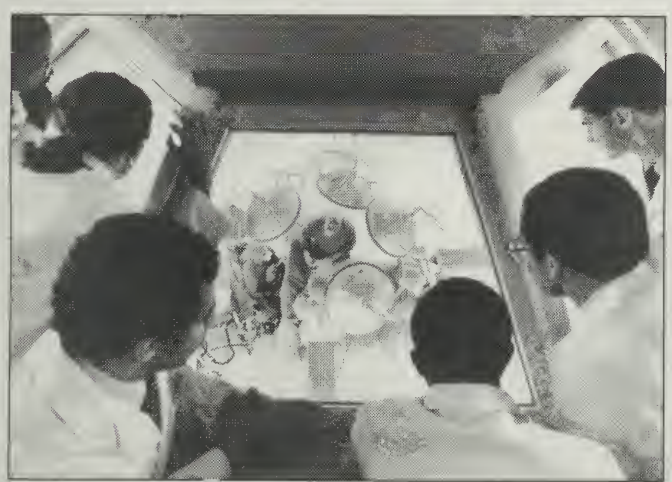
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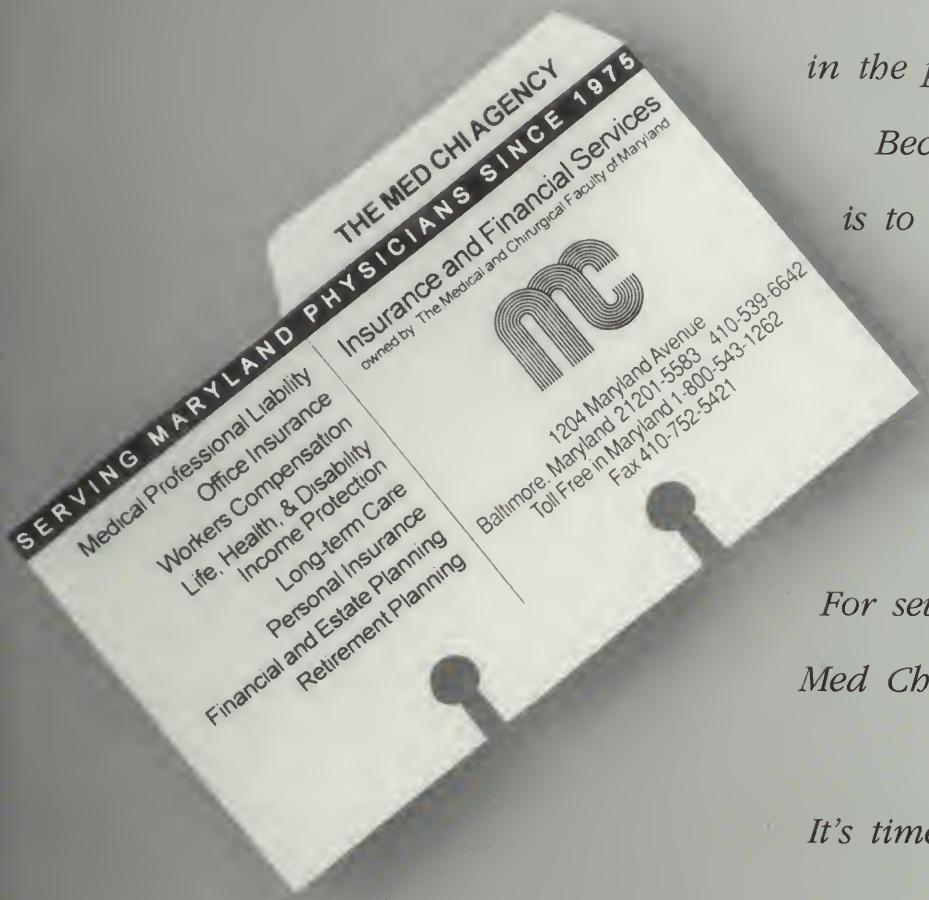
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